

PERMIT NUMBER V95-008
FINAL REVISED PERMIT CONDITIONS
May 23, 2005

These Permit Conditions incorporate the following Permit Revisions:

Minor Permit Revision 8-4-00-01

Significant Permit Revision S00-009

Significant Permit Revision S01-014

Minor Permit Revision 5-13-03-02

Significant Permit Revision S03-004

Minor Permit Revision 10-27-03-01

Minor Permit Revision 5-26-04-02

Table of Contents

GENERAL PERMIT CONDITIONS:

1. AIR POLLUTION PROHIBITED	1
2. CIRCUMVENTION	1
3. CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS:	1
4. COMPLIANCE:	2
COMPLIANCE REQUIRED	
COMPLIANCE CERTIFICATION REQUIREMENTS	
COMPLIANCE PLAN	
5. CONFIDENTIALITY CLAIMS	3
6. CONTINGENT REQUIREMENTS	3
ACID RAIN	
ASBESTOS	
RISK MANAGEMENT PLAN (RMP)	
STRATOSPHERIC OZONE PROTECTION	
7. DUTY TO SUPPLEMENT OR CORRECT APPLICATION	5
8. EMERGENCY EPISODES	5
9. EMERGENCY PROVISIONS	5
10. EXCESS EMISSIONS	6

11. FEES.....	7
12. MODELING.....	7
13. MONITORING/TESTING	8
14. PERMITS	8
BASIC	
PERMITS AND PERMIT CHANGES, AMENDMENTS AND REVISIONS	
POSTING	
PROHIBITION ON PERMIT MODIFICATION	
RENEWAL	
REVISION / REOPENING / REVOCATION	
REVISION PURSUANT TO A FEDERAL HAZARDOUS AIR POLLUTANT STANDARD	
REQUIREMENTS FOR A PERMIT	
RIGHTS AND PRIVILEGES	
SEVERABILITY	
SCOPE	
TERM OF PERMIT	
TRANSFER	
15. RECORDKEEPING:	13
RECORDS REQUIRED	
RETENTION OF RECORDS	
MONITORING RECORDS	
RIGHT OF INSPECTION OF RECORDS	
16. REPORTING:.....	14
ANNUAL EMISSION INVENTORY QUESTIONNAIRE	
DATA REPORTING	
DEVIATION REPORTING	
EMERGENCY REPORTING	
EMISSION STATEMENTS REQUIRED	
EXCESS EMISSIONS REPORTING	
OTHER REPORTING	
17. RIGHT TO ENTRY AND INSPECTION OF PREMISES:	17
<u>SPECIFIC PERMIT CONDITIONS:</u>	
18. FACILITY-WIDE REQUIREMENTS	19
19. PERMIT CONDITIONS	23
20. OTHER REQUIREMENTS.....	50

21. PERMIT CONDITIONS FOR SURFACE COATING OPERATIONS AS SUPPORT ACTIVITIES FOR THIS FACILITY	52
22. PERMIT CONDITIONS FOR ARCHITECTURAL COATINGS.....	55
23. PERMIT CONDITIONS FOR GASOLINE STORAGE TANKS WITH CAPACITY GREATER THAN 250 GALLONS.....	56
24. PERMIT CONDITIONS FOR DUST GENERATING OPERATIONS.....	57
25. PERMIT CONDITIONS FOR ABRASIVE BLASTING WITH BAGHOUSE AS SUPPORT ACTIVITIES FOR THIS FACILITY	61
26. PERMIT CONDITIONS FOR ABRASIVE BLASTING WITHOUT BAGHOUSE.....	62
27. APPLICABLE REQUIREMENTS FOR INTERNAL COMBUSTION ENGINES USED FOR EMERGENCY PURPOSES	63
28. PERMIT CONDITIONS FOR THE COLD DEGREASERS AS SUPPORT ACTIVITIES FOR THIS FACILITY	64
29. PERMIT CONDITIONS FOR WIPE CLEANING	66
30. PERMIT CONDITIONS FOR CUTBACK AND EMULSIFIED ASPHALT	67
31. PERMIT CONDITIONS FOR VOLATILE ORGANIC COMPOUNDS.....	68

APPENDICES:

APPENDIX A: EQUIPMENT LIST.....	71
APPENDIX B: PERMIT SHIELD.....	74

In accordance with Maricopa County Air Pollution Control Rules and Regulations (Rules), Rule 210 § 302.2, all Conditions of this Permit are federally enforceable unless they are identified as being locally enforceable only. However, any Permit Condition identified as locally enforceable only will become federally enforceable if, during the term of this Permit, the underlying requirement becomes a requirement of the Clean Air Act (CAA) or any of the CAA's applicable requirements.

All federally enforceable terms and conditions of this Permit are enforceable by the Administrator of the United States Environmental Protection Agency (Administrator or Administrator of the USEPA hereafter) and citizens under the CAA.

Any cited regulatory paragraphs or section numbers refer to the version of the regulation that was in effect on the first date of public notice of the applicable Permit Condition unless specified otherwise.

GENERAL CONDITIONS:

- 1. AIR POLLUTION PROHIBITED:** [County Rule 100 §301] [SIP Rule 3]
No person shall discharge from any source whatever into the atmosphere regulated air pollutants which exceed in quantity or concentration that specified and allowed in the County or SIP Rules, the Arizona Administrative Code (AAC) or the Arizona Revised Statutes (ARS), or which cause damage to property or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the Maricopa County Board of Supervisors or the Director of the Arizona Department of Environmental Quality (ADEQ).
- 2. CIRCUMVENTION:** [County Rule 100 §104] [40 CFR 60.12] [40 CFR 63.4]
A person shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, conceals or dilutes an emission which would otherwise constitute a violation of this Permit or any Rule or any emission limitation or standard. No person shall circumvent the requirements concerning dilution of air contaminants by using more emission openings than is considered normal practice by the industry or activity in question.
- 3. CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS:**
[County Rule 210 §§301.7, 302.1 e (1), 305.1(c)(1) & 305.1e]
Any application form, report, or compliance certification submitted pursuant to the County Rules or these Permit Conditions shall contain certification by a responsible official of truth, accuracy, and completeness of the application as of the time of submittal. This certification and any other certification required pursuant to the County Rules or these Permit Conditions

shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

4. COMPLIANCE:

A. COMPLIANCE REQUIRED:

- 1) The Permittee must comply with all conditions of this permit and with all applicable requirements of Arizona air quality statutes and the air quality rules. Compliance with permit terms and conditions does not relieve, modify, or otherwise affect the Permittee's duty to comply with all applicable requirements of Arizona air quality statutes and the Maricopa County Air Pollution Control Regulations. Any permit non-compliance is grounds for enforcement action; for a permit revocation and reissuance, or revision; or for denial of a permit renewal application. Noncompliance with any federally enforceable requirement in this Permit constitutes a violation of the Act.
[County Rule 210 §§301.8 b (4) & 302.1 h (1)]
- 2) The Permittee shall halt or reduce the permitted activity in order to maintain compliance with applicable requirements of Federal laws, Arizona laws, the County Rules, or other conditions of this Permit.
[County Rule 210 §302.1 h (2)]
- 3) For any major source operating in a nonattainment area for any pollutant(s) for which the source is classified as a major source, the source shall comply with reasonably available control technology (RACT) as defined in County Rule 100.
[County Rule 210 §302.1 (h) (6)] [SIP Rule 220 §302.1]

Compliance with the RACT requirements of this Permit Condition for NO_x shall not be required if a waiver granted by the Administrator under Section 182 (f) of the Clean Air Act is in effect.

B. COMPLIANCE CERTIFICATION REQUIREMENTS:

[County Rule 210 §305.1 d]

The Permittee shall file a semiannual compliance certification with the Control Officer and also with the Administrator of the USEPA. The report shall certify compliance with the terms and conditions contained in this Permit, including emission limitations, standards, or work practices. The certification shall be on a form supplied or approved by the Control Officer and shall include each of the following:

- 1) The identification of each term or condition of the permit that is the basis of the certification;
- 2) The compliance status;
- 3) Whether compliance was continuous or intermittent;
- 4) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
- 5) Other facts as the Control Officer may require to determine the compliance status of the source.

The semiannual certification shall be filed at the same time as the semiannual monitoring report required by the Specific Condition section of these Permit Conditions.

C. COMPLIANCE PLAN: [County Rule 210 §305.1g]

Based on the certified information contained in the application for this Permit, the facility is in compliance with all applicable requirements in effect as of the release date of the proposed conditions for this Permit. The Permittee shall continue to comply with all applicable requirements and shall meet any applicable requirements that may become effective during the term of this permit on a timely basis.

5. CONFIDENTIALITY CLAIMS: [County Rules 100 §402 and 200 §411]

Any records, reports or information obtained from any person pursuant to the County Rules or this Permit shall be available to the public, unless the person files a claim of confidentiality in accordance with ARS §49-487(c) which:

- A. precisely identifies the information in the permit(s), records, or reports which is considered confidential, and
- B. provides sufficient supporting information to allow the Control Officer to evaluate whether such information satisfies the requirements related to trade secrets or, if applicable, how the information, if disclosed, could cause substantial harm to the person's competitive position.
The claim of confidentiality is subject to the determination by the Control Officer as to whether the claim satisfies the claim for trade secrets.

A claim of confidentiality shall not excuse a person from providing any and all information required or requested by the Control Officer and shall not be a defense for failure to provide such information.

A source that has submitted information with an application under a claim of confidentiality pursuant to ARS 49-487 and County Rule 200 shall submit a copy of such information directly to the Administrator of the USEPA.

[County Rule 210 §301.5]

6. CONTINGENT REQUIREMENTS:

NOTE: This Permit Condition covers activities and processes addressed by the Clean Air Act which may or may not be present at the facility. This condition is intended to meet the requirements of both Section 504(a) of the 1990 Amendments to the CAA which requires that Title V permits contain conditions necessary to assure compliance with applicable requirements of the Act, as well as the Acid Rain provisions, required to be in all Title V permits.

A. ACID RAIN: [County Rule 210 §§302.1b(2) & 302.1f]

- 1) Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated pursuant to Title IV of the CAA and incorporated pursuant to County Rule 371, both provisions shall be incorporated into this Permit and shall be enforceable by the Administrator.
- 2) The Permittee shall not allow emissions exceeding any allowances that the source lawfully holds pursuant to Title IV of the CAA or the regulations promulgated thereunder and incorporated pursuant to County Rule 371.
 - a) No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program and

incorporated pursuant to County Rule 371, provided that such increases do not require a permit revision pursuant to any other applicable requirement.

- b) No limit is placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to non-compliance with any other applicable requirement.
- c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated pursuant to Title IV of the CAA.
- d) All of the following prohibitions apply to any unit subject to the provisions of Title IV of the CAA and incorporated into this Permit pursuant to County Rule 371:
 - (1) Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners or operators of the unit or the designated representative of the owners or operators.
 - (2) Exceedances of applicable emission rates.
 - (3) The use of any allowance prior to the year for which it was allocated.
 - (4) Violation of any other provision of the permit.

B. ASBESTOS: [40 CFR 61, Subpart M] [County Rule 370 §301.8]
The Permittee shall comply with the applicable requirements of Sections 61.145 through 61.147 and 60.150 of the National Emission Standard for Asbestos and County Rule 370 for all demolition and renovation projects.

C. RISK MANAGEMENT PLAN (RMP): [40 CFR 68]
Should this stationary source, as defined in 40 CFR 68.3, be subject to the accidental release prevention regulations in Part 68, then the Permittee shall submit an RMP by the date specified in Section 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70. However, neither the RMP nor modifications to the RMP shall be considered to be a part of this Permit.

D. STRATOSPHERIC OZONE PROTECTION: [40 CFR 82 Subparts E, F, and G]
If applicable, the Permittee shall follow the requirements of 40CFR 82.106 through 82.124 with respect to the labeling of products using ozone depleting substances.

If applicable, the Permittee shall comply with all of the following requirements with respect to recycling and emissions reductions:

- 1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- 2) Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR 82.158.
- 3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by a certified technician pursuant to 40 CFR 82.161.

If applicable, the Permittee shall follow the requirements of 40CFR Subpart G, including all Appendices, with respect to the safe alternatives policy on the acceptability of substitutes for ozone-depleting compounds.

7. DUTY TO SUPPLEMENT OR CORRECT APPLICATION: [County Rule 210 §301.6]

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.

8. EMERGENCY EPISODES: [County Rule 600 §302] [SIP Rule 72 e, f & g]

If an air pollution alert, warning, or emergency has been declared, the Permittee shall comply with any applicable requirements of County Rule 600 §302

9. EMERGENCY PROVISIONS: [County Rule 100 §501]

An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the requirements of this Permit Condition are met.

The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
- B. The permitted source was at the time being properly operated;
- C. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in this permit; and
- D. The Permittee as soon as possible telephoned the Control Officer giving notice of the emergency and submitted notice of the emergency to the Control Officer by certified mail or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of County Rule 210. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

This provision is in addition to any emergency or upset provision contained in any applicable requirement.

10. EXCESS EMISSIONS:

[County Rule 100 §502]

NOTES: This Permit Condition is based on a County Rule which has not been adopted into the State Implementation Plan and is therefore applicable only at the County level.

There are reporting requirements associated with excess emissions. These requirements are contained in the Reporting section of the General Permit Conditions in a subparagraph called Excess Emissions.

- A. Emissions in excess of an applicable emission limitation contained in the Rules or in these Permit Conditions shall constitute a violation. For all situations that constitute an emergency as described in Rule 100 §501, the affirmative defense and reporting requirements contained in Rule 100 §501 shall apply. In all other circumstances, it shall be an affirmative defense if the owner or operator of the source has complied with the reporting requirements of Rule 100 §502.3 and these Permit Conditions in a timely manner and has demonstrated all of the following:
- 1) The excess emissions resulted from a sudden and unavoidable breakdown of the process or the control equipment, resulted from unavoidable conditions during startup or shutdown, resulted from unavoidable conditions during an upset of operations, or that greater or more extended excess emissions would result unless scheduled maintenance is performed;
 - 2) The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - 3) Where repairs were required, such repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded and off-shift labor and overtime were utilized where practical to insure that such repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the owner or operator satisfactorily demonstrated that such measures were impractical;
 - 4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
 - 5) All feasible steps were taken to minimize the impact of the excess emissions on potential violations of ambient air quality standards;
 - 6) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
 - 7) During the period of excess emissions, there were no measured violations of the ambient air quality standards established in Rule 510 which could be attributed to the emitting source.
- B. It shall be the burden of the owner or operator of the source to demonstrate, through submission of the data and information required by Rule 100 §502 and these Permit Conditions that all reasonable and practicable measures within the owner or operator's control were implemented to prevent the occurrence of excess emissions.

- 11. FEES:** [County Rules 200 §409; 210 §302.1i; 210 §401]
The Permittee shall pay fees to the Control Officer pursuant to ARS 49-480(D) and County Rule 280.

- 12. MODELING:** [County Rule 200 §407]
Where the Control Officer requires a person to perform air quality impact modeling, the modeling shall be performed in a manner consistent with the "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, July 1986) and "Supplement B to the Guideline on Air Quality Models" (U.S. Environmental Protection Agency, September 1990). Both documents shall be referred to hereinafter as "Guideline", and are adopted by reference. Where the person can demonstrate that an air quality impact model specified in the guideline is inappropriate, the model may be modified or another model substituted if found to be acceptable to the Control Officer.

- 13. MONITORING/TESTING:**
The Permittee shall monitor, sample, or perform other studies to quantify emissions of regulated air pollutants or levels of air pollution that may reasonably be attributable to the facility if required to do so by the Control Officer, either by Permit or by order.
[County Rule 200 §309]

Except as otherwise specified in these Permit Conditions or by the Control Officer, required testing used to determine compliance with standards or permit conditions established pursuant to the County or SIP Rules or these Permit Conditions shall be conducted in accordance with County Rule 270 and the applicable testing procedures contained in the Arizona Testing Manual for Air Pollutant Emissions or other approved USEPA test methods.
[County Rule 200 §408 & County Rule 270]

Equivalent test methods and procedures may be used in lieu of those described in this paragraph if approved by the Control Officer
[County Rule 270 §402]

The owner or operator of a permitted source shall provide, or cause to be provided, performance testing facilities as follows:

- A. Sampling ports adequate for test methods applicable to such source.
- B. Safe sampling platform(s).
- C. Safe access to sampling platforms(s).
- D. Utilities for sampling and testing equipment.

[County Rule 270 §405]

14. PERMITS:

A. BASIC:

[County Rule 210 §302.1 h (3)]

This Permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

B. PERMITS AND PERMIT CHANGES, AMENDMENTS AND REVISIONS:

[County Rule 200 §§301 & 308]

[County Rule 210 §§301.4a, b, & c, and 400]

The Permittee shall comply with the Administrative Requirements of Section 400 of County Rule 210 for all changes, amendments and revisions at the facility for any source subject to regulation under County Rule 200, shall comply with all required time frames, and shall obtain any required preapproval from the Control Officer before making changes. All applications shall be filed in the manner and form prescribed by the Control Officer. The application shall contain all the information necessary to enable the Control Officer to make the determination to grant or to deny a permit or permit revision including information listed in County Rule 200 §308 and County Rule 210 §§301 & 302.3.

The Permittee shall supply a complete copy of each application for a permit, a minor permit revision, or a significant permit revision directly to the Administrator of the USEPA. The Control Officer may require the application information to be submitted in a computer-readable format compatible with the Administrator's national database management system.

[County Rule 210 §§303.1(a), 405.4, & 406.4]

The Control Officer may with reasonable cause require the applicant to provide additional information and may set a reasonable deadline for a response.

[County Rule 210 §301.4f]

No permit revision shall be required pursuant to any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

[County Rule 210 §302.1j]

C. POSTING:

Any person who has been granted a permit shall keep a complete permit clearly visible and accessible on the site where the equipment is installed.

[County Rule 200 §311]

If a Dust Control Plan, as required by Rule 310, has been approved as a part of this Permit, a copy of the latest approved Dust Control Plan must be posted in a conspicuous site at the worksite, within on-site equipment, in an on-site vehicle, or otherwise kept readily available on site at all times.

[County Rule 310 §402]

- D. PROHIBITION ON PERMIT MODIFICATION:** [County Rule 200 §310]
A person shall not willfully deface, alter, forge, counterfeit, or falsify this permit.

- E. RENEWAL:** [County Rule 210 §§ 301 & 302]
The Permittee shall submit an application for the renewal of this Permit in a timely and complete manner. For purposes of permit renewal, a timely application is one that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration. A complete application shall contain all of the information required by the County Rules including Rule 200 §308 and Rule 210 §§301 & 302.3.
[County Rule 210 §§301.2a and 301.4a, b, c, d, h]

All permit applications shall be filed in the manner and form prescribed by the Control Officer. To apply for a permit renewal, applicants shall complete the "Standard Permit Application Form" and shall supply all information, including the information required by the "Filing Instructions" as shown in Appendix B of the County Rules, which is necessary to enable the Control Officer to make the determination to grant or to deny a permit which shall contain such terms and conditions as the Control Officer deems necessary to assure a source's compliance with the requirements of the County Rules.

[County Rule 200 §§308 & 309] [County Rule 210 §301.1]

The Control Officer may with reasonable cause require the applicant to provide additional information and may set a reasonable deadline for a response.

[County Rule 210 § 301.4f]

If a timely and complete application for a permit renewal is submitted, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the renewal permit has been issued or denied. This protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit, by the deadline specified by the Control Officer, any additional information identified as being needed to process the application.

[County Rules 200 §403.2 and 210 §§301.4f and 301.9]

F. REVISION / REOPENING / REVOCATION:

- 1) This permit shall be reopened and revised to incorporate additional applicable requirements adopted by the Administrator pursuant to the CAA that become applicable to the facility if this permit has a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this Permit is due to expire unless the original permit or any of its terms have been extended pursuant to Rule 200 §403.2.

[County Rules 200 §402.1]

Any permit revision required pursuant to this paragraph shall reopen the entire permit and shall comply with provisions in County Rule 200 for permit renewal (*Note: this includes a facility wide application and public comment on the entire permit*) and shall reset the five year permit term. [County Rules 200 §402.1a(1) &

210 §302.5, is locally enforceable only, and would apply if the permit is reopened and revised under this paragraph by the Control Officer.]

Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall effect only those parts of the Permit for which cause to reopen exists. [40CFR 70.7(f)(2) and would apply if the permit is reopened and revised under this paragraph by the Administrator.]

- 2) This permit shall be reopened and revised under any of the following circumstances:
 - a) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Title V permit.
[County Rule 200 §402.1]
 - b) The Control Officer or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
[County Rule 200 §402.1]
 - c) The Control Officer or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
[County Rule 200 §402.1]

Proceedings to reopen and issue a permit under subparagraphs a), b), or c) of this subsection shall follow the same procedures as apply to initial permit issuance and shall effect only those parts of the Permit for which cause to reopen exists.

[County Rule 200 §402.1]

- 3) In addition, this permit shall be reopened by the Control Officer and any permit shall be revised, when it is determined that standards or conditions in the permit are based on incorrect information provided by the applicant.
[County Rule 210 §407.3]
- 4) This Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Permit revision, revocation and reissuance, or termination or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.
[County Rule 210 §302.1 h (3)]

G. REVISION PURSUANT TO A FEDERAL HAZARDOUS AIR POLLUTANT STANDARD:

[County Rule 210 §301.2c]

If the Permittee becomes subject to a standard promulgated by the Administrator pursuant to Section 112(d) of the CAA, the Permittee shall, within 12 months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

H. REQUIREMENTS FOR A PERMIT:

Except as noted pursuant to the provisions in Sections 403 and 405 of County Rule 210, no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued pursuant to County Rule 210. Permit expiration terminates the Permittee's right to operate. However, if a source submits a timely and complete application, as defined in County Rule 210 §301, for permit issuance, revision, or renewal, the source's failure to have a permit is not a violation of the County Rules until the Control Officer takes final action on the application. The Source's ability to operate without a permit as set forth in this paragraph shall be in effect from the date the application is determined to be complete until the final permit is issued. This protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit, by the deadline specified in writing by the Control Officer, any additional information identified as being needed to process the application. If a source submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the permit renewal has been issued or denied.

[County Rule 210 §301.9]

No person shall commence any earth moving operation or any dust generating operation without meeting the requirements of and obtaining any and all Earth Moving Equipment Permits and Permits to Operate required by County Rule 200. The provisions of this section shall not apply:

- 1) During emergency, life threatening situations or in conjunction with any officially declared disaster or state of emergency;
- 2) To operations conducted by essential service utilities to provide electricity, natural gas, oil and gas transmission, cable television, telephone, water, and sewerage during service outages and emergency disruptions;
- 3) To non-routine or emergency maintenance of flood control channels and water retention basins.
- 4) To vehicle test and development facilities and operations when dust is required to test and validate design integrity, product quality and/or commercial acceptance. Such facilities and operations shall be exempted from the provisions of this section only if such testing is not feasible within enclosed facilities.

[County Rule 310 §302] [SIP Rule 310 §302]

The Permittee shall obtain a Permit To Burn from the Control Officer before conducting any open outdoor fire except for the activities listed in County Rule 314 §§302.1 and 302.2.

[County Rules 314 & 200 §306] [SIP Rule 314]

I. RIGHTS AND PRIVILEGES:

[County Rule 210 §302.1 h (4)]

This Permit does not convey any property rights nor exclusive privilege of any sort.

J. SEVERABILITY:

[County Rule 210 §302.1g]

The provisions of this Permit are severable, and, if any provision of this Permit is held invalid, the remainder of this Permit shall not be affected thereby.

K. SCOPE:

The issuance of any permit or permit revision shall not relieve the owner or operator from compliance with any Federal laws, Arizona laws, or the County or SIP Rules, nor does any other law, regulation or permit relieve the owner or operator from obtaining a permit or permit revision required under the County Rules.

[County Rule 200 §308] [SIP Rule 22H]

Nothing in this permit shall alter or affect the following:

- 1) The provisions of Section 303 of the Act, including the authority of the Administrator pursuant to that section.
- 2) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.
- 3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act.
- 4) The ability of the Administrator of the USEPA or of the Control Officer to obtain information from a source pursuant to Section 114 of the Act, or any provision of State law.
- 5) The authority of the Control Officer to require compliance with new applicable requirements adopted after the permit is issued.

[County Rule 210 §407.2]

L. TERM OF PERMIT:

[County Rule 210 §§302.1a & 402]

This Permit shall remain in effect for no more than 5 years from the date of issuance.

M. TRANSFER:

[County Rule 200 §404]

Except as provided in ARS 49-429 and County Rule 200, this permit may be transferred to another person if the person who holds the permit gives notice to the Control Officer in writing at least 30 days before the proposed transfer and complies with the permit transfer requirements of County Rule 200 and the administrative permit amendment procedures pursuant to County Rule 210.

15. RECORDKEEPING:

A. RECORDS REQUIRED:

[County Rule 100 §503]

The owner or operator of any air pollution source shall maintain records of all emissions testing and monitoring, records detailing all malfunctions which may cause any applicable emission limitation to be exceeded, records detailing the implementation of approved control plans and compliance schedules, records required as a condition of any permit, records of materials used or produced and any other records relating to the emission of air contaminants which may be requested by the Control Officer.

B. RETENTION OF RECORDS:

Information and records required by the Control Officer or these Permit Conditions as well as copies of summarizing reports recorded by the owner or operator and submitted to the Control Officer shall be retained by the owner or operator for five years after the date on which the pertinent report is submitted.

[County Rule 100 §506]

Records of all required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or physical records for continuous monitoring instrumentation, and copies of all reports required by the permit.

[County Rule 210 §§302.1 d (2) and 305.1 b (2)]

C. MONITORING RECORDS: [County Rule 210 §§302.1 d (1) and 305.1 b (1)]

Records of any monitoring required by this Permit shall include the following:

- 1) The date, place as defined in the permit, and time of sampling or measurements;
- 2) The date(s) analyses were performed;
- 3) The company or entity that performed the analyses;
- 4) The analytical techniques or methods used;
- 5) The results of such analyses; and
- 6) The operating conditions as existing at the time of sampling or measurement

D. RIGHT OF INSPECTION OF RECORDS: [County Rule 100 §106]

When the Control Officer has reasonable cause to believe that any person has violated or is in violation of any provision of County Rule 100 or any County Rule adopted pursuant to County Rule 100, or any requirement of this permit, the Control Officer may request, in writing, that such person produce all existing books, records, and other documents evidencing tests, inspections, or studies which may reasonably relate to compliance or noncompliance with County Rules adopted pursuant to County Rule 100. No person shall fail nor refuse to produce all existing documents required in such written request by the Control Officer.

16. REPORTING:

NOTE: See the Permit Condition titled Certification Of Truth, Accuracy and Completeness in conjunction with reporting requirements.

A. ANNUAL EMISSION INVENTORY QUESTIONNAIRE:

[County Rule 100 §507]

Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall complete and shall submit to the Control Officer an annual emissions inventory report. The report is due by April 30 or 90 days after the Control Officer makes the inventory form(s) available, whichever occurs later.

The annual emissions inventory report shall be in the format provided by the Control Officer.

The Control Officer may require submittal of supplemental emissions inventory information forms for air contaminants pursuant to Arizona Revised Statutes (ARS) §49-476.01, ARS §49-480.03 and ARS §49-480.04.

B. DATA REPORTING: [County Rule 100 §504]

When requested by the Control Officer, a person shall furnish to the Maricopa County Air Quality Division (Division hereafter) information to locate and classify air contaminant sources according to type, level, duration, frequency and other

characteristics of emissions and such other information as may be necessary. This information shall be sufficient to evaluate the effect on air quality and compliance with the County or SIP Rules. The owner or operator of a source requested to submit information pursuant to this Permit may subsequently be required to submit annually, or at such intervals specified by the Control Officer, reports detailing any changes in the nature of the source since the previous report and the total annual quantities of materials used or air contaminants emitted.

C. DEVIATION REPORTING:

[County Rules 100 §501.3d & 210 §§302.1 e & 305.1(c)]

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions. Unless specified otherwise elsewhere in these Permit Conditions, an upset for the purposes of this Permit Condition shall be defined as the operation of any process, equipment or air pollution control device outside of either its normal design criteria or operating conditions specified in this Permit and which results in an exceedance of any applicable emission limitation or standard. The report shall be submitted to the Control Officer by certified mail, facsimile, or hand delivery within two working days of the knowledge of the deviation and shall contain a description of the probable cause of such deviations, and any corrective actions or preventive measures taken. In addition, the Permittee shall report within a reasonable time of any long term corrective actions or preventative actions taken as the result of any deviations from permit requirements.

All instances of deviations from the requirements of this Permit shall also be clearly identified in the semiannual monitoring reports required in the Specific Condition section of these Permit Conditions.

D. EMERGENCY REPORTING:

[County Rule 100 §501]

(NOTE: Emergency Reporting is one of the special requirements which must be met by a Permittee wishing to claim an affirmative defense under the emergency provisions of Rule 100 §501. These provisions are listed earlier in these General Conditions in the section titled "Emergency Provisions". Since it is a form of deviation reporting, the filing of an emergency report also satisfies the requirement of Rule 210 to file a deviation report)

The Permittee shall, as soon as possible, telephone the Control Officer giving notice of the emergency and submitted notice of the emergency to the Control Officer by certified mail or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of County Rule 210. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

E. EMISSION STATEMENTS REQUIRED AS STATED IN THE ACT:

[County Rule 100 §505]

Upon request of the Control Officer and as directed by the Control Officer, the owner or operator of any source which emits or may emit oxides of nitrogen (NO_x) or volatile organic compounds (VOC) shall provide the Control Officer with an emission statement, in such form as the Control Officer prescribes, showing measured actual emissions or estimated actual emissions of NO_x and VOC from that source. At a

minimum the emission statement shall contain all information contained in the "Guidance on Emission Statements" document as described in the USEPA's Aerometric Information Retrieval System (AIRS) Fixed Format Report (AFP 644). The statement shall contain emissions for the time period specified by the Control Officer. Statements shall be submitted annually. The Control Officer may waive this requirement for the owner or operator of any source which emits less than 25 tons per year of oxides of nitrogen or volatile organic compounds with an approved emission inventory for sources based on the USEPA's Compilation of Air Pollutant Emission Factors (AP-42) or other methodologies approved by the Administrator.

F. EXCESS EMISSIONS REPORTING:

[County Rule 100 §502]

(NOTE: This reporting subsection is associated with the requirements listed earlier in these General Conditions in the section titled "Excess Emissions".)

- 1) Excess emissions shall be reported as follows:
 - a) The Permittee shall report to the Control Officer any emissions in excess of the limits established either by the Rules or these Permit Conditions. The report shall be in two parts as specified below:
 - (1) Notification by telephone or facsimile within 24 hours of the time when the owner or operator first learned of the occurrence of excess emissions including all available information from paragraph F. 1) b) below of this Permit Condition.
 - (2) Detailed written notification within 72 hours of the telephone notification pursuant to paragraph F. 1) a) (1) above of this Permit Condition.
 - b) The excess emissions report shall contain the following information:
 - (1) The identity of each stack or other emission point where the excess emissions occurred.
 - (2) The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.
 - (3) The time and duration or expected duration of the excess emissions.
 - (4) The identity of the equipment from which the excess emissions emanated.
 - (5) The nature and cause of such emissions.
 - (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction.
 - (7) The steps that were or are being taken to limit the excess emissions. If this Permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the Permit procedures.
- 2) In the case of continuous or recurring excess emissions, the notification requirements of this section of this rule shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to Rule 100 §502.3(a)(2).

G. OTHER REPORTING:

[County Rule 210 §302.1 h (5)]

The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing this permit, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by this Permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records directly to the Administrator along with a claim of confidentiality as covered elsewhere in these Permit Conditions.

17. RIGHT TO ENTRY AND INSPECTION OF PREMISES:

[County Rules 100 §105 and 210 §305.1f]

The Control Officer during reasonable hours, for the purpose of enforcing and administering County Rules, or any provision of the Arizona Revised Statutes relating to the emission or control prescribed pursuant thereto, may enter every building, premises, or other place, except the interior of structures used as private residences. Every person is guilty of a petty offense pursuant to ARS §49-488 who in any way denies, obstructs or hampers such entrance or inspection that is lawfully authorized by warrant.

The Permittee shall allow the Control Officer or his authorized representative, upon presentation of proper credentials and other documents as may be required by law, to:

- A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept pursuant to the conditions of the permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept pursuant to the conditions of the permit;
- C. Inspect, at reasonable times, any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required pursuant to this permit;
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- E. To record any inspection by use of written, electronic, magnetic, and photographic media. (Locally enforceable only)

SPECIFIC CONDITIONS:

- 18. FACILITY-WIDE REQUIREMENTS:** The following permit conditions apply to all activities at the facility. The major emitting equipment at the facility is described in Appendix A of this Permit. The Permittee shall not deviate from the equipment described in Appendix A, except in accordance with the provisions of County Rule 210 Section 400.

A. ALLOWABLE EMISSIONS:

1) Offsite Sulfur Oxides limits:

The Permittee shall not emit into the ambient air any sulfur oxide in such manner and amounts as to result in ground level concentrations at any place beyond the premises on which the source is located exceeding those limits shown in the following table:

**Table 1
Offsite Sulfur Oxide Limits**

Concentration of Sulfur Dioxide (ug/cubic m)	Averaging Time (hours)
850	1
250	24
120	72

[SIP Rule 32 F]

2) Opacity Limits

The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant other than condensed water containing no more than analytical trace amounts of other chemical elements or compounds, in excess of 20 percent opacity [40 percent opacity according to SIP Rule 30], except the following:

- a) **Start-up and Shut-down:** Visible emissions exceeding the opacity standards for short periods of time resulting from start-up, shut-down, soot blowing or unavoidable combustion irregularities which do not exceed three minutes in length shall not constitute a violation provided that the Control Officer finds that adequate control technology has been applied.
- b) **Emergencies:** Unavoidable combustion irregularities which exceed three minutes shall not constitute a violation of these Permit Conditions providing the owner or operator demonstrate to the Control Officer's satisfaction that an emergency exists in accordance with County Rule 100 § 501.

[County Rule 300 §§ 301, 302.1,2] [locally enforceable only]

- c) **Opacity Determination:** Opacity shall be determined by observations of visible emissions conducted in accordance with EPA Reference Method 9 except opacity of visible emissions from intermittent sources: Opacity of visible emissions from intermittent sources shall be determined by observations conducted in accordance with EPA Reference Method 9,

except that at least 12 rather than 24 consecutive readings shall be required at 15-second intervals for the averaging time.

[County Rule 300 §§ 501, 502] [locally enforceable only]

B. OPERATIONAL LIMITATIONS:

- 1) The Permittee shall combust only pipeline quality natural gas with a sulfur content of 0.005 grains per dry standard cubic foot (gr/dscf) in Units S-5A, S-5B, and S-6A. The Permittee shall combust only pipeline quality natural gas with a sulfur content of 0.005 grains per dry standard cubic foot (gr/dscf) in Units S-1 through S-4 except for when combusting emergency fuel pursuant to County Rule 322. The Permittee shall combust only emergency diesel fuel with a sulfur content of 0.0015 percent by weight or less (ultra low sulfur diesel), in accordance with Permit Condition 19.D. For the emergency fire pumps and emergency generator, the Permittee shall combust only commercially available diesel fuel with sulfur content of 0.05 percent by weight or less.

County Rule 322 §212 defines "emergency fuel" as fuel fired only during circumstances such as natural gas emergency, natural gas curtailment, or breakdown of delivery system such as an unavoidable interruption of the supply that makes it impossible to fire natural gas in the unit. Fuel is not considered emergency fuel if it is used to avoid either peak demand charges or high gas prices during on-peak price periods or due to a voluntary reduction in natural gas usage by the power company.

[County Rule 241 § 301.2]

[County Rule 322] [locally enforceable only]

- 2) The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.

[County Rule 320 § 300] [locally enforceable only]

- 3) Materials including, but not limited to, solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizer and manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or equipment shall be mandatory.

[County Rule 320 § 302] [locally enforceable only]

- 4) Where a stack, vent or other outlet is at such a level that air contaminants are discharged to adjoining property, the Control Officer may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet to a degree that will adequately dilute, reduce or eliminate the discharge of air contaminants to adjoining property.

[County Rule 320 § 303] [locally enforceable only]

C. OTHER:

[County Rule 240 § 307] [locally enforceable only]

- 1) The provisions of this Permit Condition only apply to stationary sources of VOC or oxides of nitrogen in ozone nonattainment areas classified as serious or severe. Unless otherwise provided in this Permit Condition, all requirements of County Rules 200, 210, 240, 245, and 270 apply.
- 2) For the purposes of this Permit Condition, significant means, for the purposes of a major modification of any stationary source of VOC or oxides of nitrogen, any physical changes or changes in the method of operations that results in net increases in emissions of either pollutant by more than 25 tons when aggregated with all other creditable increases in emissions from the source over the prior five consecutive calendar years, including the calendar year in which the increase is proposed.
- 3) For any stationary source that emits or has the potential to emit less than 100 tons VOC or oxides of nitrogen per year, a significant increase in VOC or oxides of nitrogen, respectively from any discrete emissions unit, operation, or other pollutant emitting activity shall constitute a major modification unless the increase in emissions is offset from other units, operations or activities at the source at a ratio of 1.3:1 for the increase in VOC or oxides of nitrogen from such unit, operation, or activity within the facility only. If such a change qualifies as a major modification pursuant to this rule, BACT shall be substituted for LAER. Net emissions increases in VOC or oxides of nitrogen above the internal offset described herein shall be subject to the offset requirements in paragraphs 5) and 6) of this Permit Condition.
- 4) For any stationary source that emits or has the potential to emit 100 tons or more of VOC or oxides of nitrogen per year, any significant increase in VOC or oxides of nitrogen, respectively from any discrete emitting unit, operation, or other pollutant emitting activity shall constitute a major modification. If the increase in emissions from such modification is offset from other units, operations or activities at the source at a ratio of 1.3:1 for the increase in VOC or oxides of nitrogen, respectively from such unit, operation or activity, BACT shall be substituted for LAER. Net emissions increases in VOC or oxides of nitrogen above the internal offset described herein shall be subject to the offset requirements in paragraphs 5) and 6) of this Permit Condition.
- 5) For any major modification which is classified as such because of emissions or potential to emit VOC or oxides of nitrogen in an ozone nonattainment area classified as serious, the increase in emissions of these pollutants from such source or modification shall be offset at a ratio of 1.2:1. Such offset shall be made in accordance with the provisions of Section 306 of County Rule 240.
- 6) For any major modification which is classified as such because of emissions or potential to emit VOC or oxides of nitrogen in an ozone nonattainment area classified as severe, the increase in emissions of these pollutants from such source or modification shall be offset at a ratio of 1.3:1. If the SIP requires all existing major sources of these pollutants in the nonattainment area to apply BACT, then the offset ratio shall be 1.2:1. All such offsets shall be made in accordance with the provisions of Section 306 of County Rule 240.

- 7) This condition is applicable to the offsets from road paving that will be used to meet the PM10 offset requirement of this permit. All particulate matter offsets required for the operation of Units S-5A, S-5B and S-6A, Cooling Towers CT-5 and CT-6 and 2 Emergency Diesel Engines (310 hp and 410 hp) shall comply with a rule governing the generation of offsets from the paving of roads no longer than 18 months after the promulgation of such rule. This rule is to be developed by the Maricopa County Environmental Services Department and submitted to the U.S. Environmental Protection Agency for inclusion into the state implementation plan for the Phoenix Planning Area.
[County Rule 240 § 307] [locally enforceable only]

19. PERMIT CONDITIONS:

A. ALLOWABLE EMISSIONS:

1) Particulate matter limits (General):

The Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any fuel burning equipment or stationary rotating machinery having a heat input rate of 4,200 million Btu per hour or less in excess of the amounts calculated by the following equation:

$$E = 1.02 Q^{0.769} \quad \text{where:}$$

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

Q = the heat output in million Btu per hour.

[A.A.C. R-18-2-703, 719, 724, SIP Rule 31, H]

2) Facility Emission Limits

During the commissioning period, as defined by Condition 19.B.14, emissions from the facility shall meet the requirements of Condition 19.B.14. Upon initial startup of Unit S-5A, S-5B or S-6A as defined by 40 CFR 60.2, and at all times thereafter, emissions from the facility shall not exceed the limits specified in Tables 2 and 4. On and after the date by which initial performance testing is required by Condition 19.F, emissions from the facility shall also not exceed the limits specified in Tables 3, and 5. *[Refer to Notes located after Table 5 at the end of this subsection and Appendix A for explanation of terms].*

Table 2
Rolling 12-month Average Limits (tons per year)

Device	SO ₂	NO _x	CO	PM ₁₀	VOC
Units S-1 through S-4 (Combined)	22.48	1056.0	174.0	105.88	33.68
Units S-5A, S-5B, and S-6A (Combined)	34.8	212.8	304.1	170.3	59.8
Cooling Tower CT1	NA	NA	NA	3.34	NA
Cooling Tower CT6	NA	NA	NA	1.58	NA
Cooling Tower CT5	NA	NA	NA	3.45	NA
Total	57.3	1268.8	478.1	284.6	93.5

[County Rule 210, § 302.1.b] [County Rule 240, §305.1.a]

[County Rule 241, §301.2]

Table 3
**Hourly Emission Limits During Periods When Turbines Operate in
Other than Startup/Shutdown Mode (lb/hour) (3-hour average)**

Device	SO ₂ **	NO _x **	CO**	PM ₁₀ *	VOC*
Units S-5A, S-5B and S-6A (each) without duct firing	2.5	13.2	8.1	12.5	2.3
Units S-5A and S-5B (each) with duct firing	3.3	16.6	10.1	16.2	5.8
Unit S-6A with duct firing	3.2	16.6	10.1	15.5	5.8

* Hourly emission limits for PM₁₀ and VOC are federally enforceable. [County Rule 240, § 305.1.a] [40 CFR 60.43a(b), (g)][40 CFR 60.333(a)]

** Hourly emission limits for NO_x, SO_x, and CO are locally enforceable levels only. [County Rule 241 § 301.2]

[County Rule 240, § 305.1.a][County Rule 241 § 301.2]
[40 CFR 60.43a(b), (g)][40 CFR 60.333(a)]

Table 4
Hourly Emission Limits for Units S-5A, S-5B, and S-6A
During Periods When Turbines Operate in Startup Mode
(lb/hour) (1-hour average)

Device	NO _x	CO	VOC
Each Turbine	227.1	760.2	94.3

For pollutants not included in Table 4, limits in Table 3 shall apply during startup.
[County Rule 240 § 305.1.a][County Rule 241 § 301.2]

Table 5
Additional Concentration or Rate Emission Limits

Device	NO _x ***	CO***	PM ₁₀ Total**	VOC**	Other	Reference
Each of Units S-5A, S-5B, and S-6A when Operating in Other than Startup/ Shutdown Mode (without duct firing)	2.0 ppmvd 1-hour rolling average	2.0 ppmvd 3-hour rolling average	0.01 lb/MMBtu (HHV) 3-hour rolling average	1.0 ppmvd 3-hour rolling average	Ammonia 10 ppmvd 24-hour rolling average	LAER*
Each of Units S-5A, S-5B, and S-6A when Operating in Other than Startup/ Shutdown Mode (with duct firing)	2.0 ppmvd 1-hour rolling average	2.0 ppmvd 3-hour rolling average	0.01 lb/MMBtu (HHV) 3-hour rolling average	2.0 ppmvd 3-hour rolling average	Ammonia 10 ppmvd 24-hour rolling average	LAER*
Cooling Towers CT6 and CT5	NA	NA	Drift eliminators limiting drift to 0.0005% and Total Dissolved Solids (TDS) content of cooling water 3,600 mg/l	NA	NA	LAER
Natural Gas Fuel Sulfur Content	NA	NA	NA	NA	Sulfur content 0.005 grains/dry standard cubic foot	BACT
Diesel Fire Pump 2 and Emergency Generator	9.2 g/kW-hr (each)	11.4 g/kW-hr (each)	0.54 g/kW-hr (each)	1.3 g/kW-hr (each)	Sulfur Content 0.05% by weight	EPA Tier 1 Standards; 40 CFR 89.112

* Although the Santan Expansion Project is not subject to LAER for NO_x and CO under the Nonattainment New Source Review requirements, the Project is required to meet LAER levels for criteria pollutants as required by the Arizona Corporation Commission.

** Hourly emission limits for PM₁₀ and VOC are federally enforceable.

*** Hourly emission limits for NO_x, SO_x, and CO are locally enforceable only.

[County Rule 240 § 305.1.a][County Rule 241 § 301.2]
[40 CFR 60.42a(a)(1)][40 CFR 60.42a(b)][40 CFR 60.43a(b)]
[40 CFR 60.44a(d)(1)], [40 CFR 60.332(a)(1)]
[40 CFR 60.332(b)], [40 CFR 60.333(a)], [40 CFR 60.333(b)]

The following Notes apply to Tables 2, 3, 4, and 5.

- a) NA (Not Applicable) means that the device does not emit the indicated pollutant.
- b) Startup is defined as the period between when ignition is initiated in Gas Turbine S-5A, S-5B, or S-6A until the temperature of the Gas Turbine exhaust prior to entering the Oxidation Catalyst System reaches 560 degrees Fahrenheit and the Gas Turbine begins operating in premix mode (PM6). The Gas Turbine begins operating in premix mode when the Mark VI controls open all of the inlet gas ports in the combustors.
- c) Shutdown is defined as the period beginning when the electrical load of Gas Turbine S-5A, S-5B, or S-6A stops operating in premix mode and ending when combustion has ceased.
- d) The rolling 12- month limits shall be calculated monthly using the data from the most recent 12 calendar months, with a new 12-month period beginning on the first day of each calendar month.
- e) The 3-hour rolling average limits shall be calculated hourly using the data from the most recent 3 hours, with a new 3-hour period beginning each hour.
- f) NO_x emissions during normal operations shall be calculated in accordance with 40 CFR Part 75, Appendix F, except for demonstrating compliance with 40 CFR Part 60 Subparts Da and GG.
[40 CFR 75 Appendix F]
- g) NO_x emissions from Duct Burner S-5A, S-5B, or S-6A shall be calculated as required by 40 CFR 60.46a(k).
[40 CFR 60.46a(k) and 60.47a(o)]
- h) CO emissions shall be calculated from CEMS data.
- i) NO_x emissions from Gas Turbine S-5A, S-5B, or S-6A shall be calculated as required by 40 CFR 60.335(c)(1) unless the Gas Turbine S-5A, S-5B, or S-6A is installed with a Mark V or functionally equivalent controller programmed with an algorithm acceptable to the Administrator and Control Officer that continuously corrects for variations in ambient humidity, temperature, and pressure yielding a relatively constant NO_x concentration when corrected to 15 percent oxygen, in which case the CEMS data can be used without the 40 CFR 60.335(c)(1) correction.
[40 CFR 60.335(c)(1)]
- j) In the event that the NO_x or CO CEMS measuring startup/shutdown emissions is not operational or cannot reliably document emissions, startup/shutdown emissions shall be calculated by monitoring the total elapsed time during the startup/shutdown sequence and multiplying by the appropriate startup/shutdown emission rates in Table 4. An

alternative emission rate can be used if such rate is demonstrated to the satisfaction of the Control Officer and the Administrator to be more representative of startup/shutdown emissions.

- k) In the event that CEMS data are not available when not in startup/shutdown mode, NO_x emissions shall be calculated using the following emission factors and the amount of fuel combusted (converted to MMBtu/hr from the heat content (MMBtu) per cubic foot of natural gas). The natural gas emission factor for Base Load shall be determined from the most recent source emissions tests. The emission factor determined from the source test conducted at 60 to 80% of nameplate capacity shall be used for Base Load conditions less than or equal to 80% and the emission factor determined from the source test conducted at 95% to 105% of nameplate capacity shall be used for Base Load conditions greater than 80% of nameplate capacity. The natural gas emission factor for NO_x for Peak Load shall be 0.16 lb/MMBtu.
- l) VOC and PM₁₀ emissions during normal operations and startup/shutdown periods from Unit S-5A, S-5B, or S-6A shall be calculated using monitored fuel flow and the emission factors contained in the Permit Application dated May 6, 2002, unless, during the initial compliance demonstrations, an alternative emission factor can be demonstrated to the satisfaction of the Control Officer and the Administrator to be more representative of emissions. The natural gas emission factor for PM₁₀ for units S-5A, S-5B and S-6A for normal operations and startup/shutdown periods shall be 0.01 lb/MMBtu. The natural gas emission factor for VOC for units S-5A, S-5B and S-6A for normal operations shall be based on the emission limits of 1.0 ppmvd without duct firing and 4.0 ppmvd with duct firing; using the EPA F-Factor methodology of EPA Method 19, these equate to 0.00128 lb/MMBtu and 0.00513 lb/MMBtu, respectively. The natural gas emission factor for VOC for units S-5A, S-5B and S-6A for startup shall be 93.3 lb/hr for the first hour and 2.8 lb/hr for the duration of startup.
- m) PM₁₀, and VOC emissions from Units S-1, S-2, S-3 and S-4 shall be calculated using fuel flow and the emission factors (e.g., EPA AP-42, Chapter 3, April 2000) contained in the Permit Application dated May 6, 2002, unless, during the initial compliance demonstrations, an alternative emission rate can be demonstrated to the satisfaction of the Control Officer and the Administrator to be more representative of emissions. The natural gas emission factor for PM₁₀ for Units S-1, S-2, S-3 and S-4 shall be 0.01 lb/MMBtu. The natural gas emission factor for VOC for Units S-1, S-2, S-3 and S-4 shall be 0.0021 lb/MMBtu.
- n) PM₁₀ emissions from the Cooling Towers CT6 and CT5 shall be calculated from the following equation:

$$\text{PM}_{10} \text{ Emissions (tons/yr)} = \text{Total Recirculation Rate (gallons/minute)} * \text{TDS Concentration (milligrams/liter)} * 5.482\text{E-}09$$

Where the value 5.482E-09 is a conversion factor for cooling tower drift rate (0.0005%), milligrams to tons, liters to gallons, minutes to year, and one-half total particulate as PM₁₀.

- o) SO₂ emissions from all units shall be calculated from fuel usage during normal operations and startup/shutdown and the sulfur content of the fuel as determined by Condition 19.C.10 of this permit
- p) Unless otherwise stated, the PM₁₀ emission limits include both solid (filterable) and condensable particulate matter. Filterable PM₁₀ is measured with 40 CFR Part 60 Appendix A Method 5. Condensable particulate matter is measured with 40 CFR 60 Appendix A Method 202.
- q) Concentration limits are parts per million by volume corrected to 15% oxygen on a dry basis.
- r) When multiple or alternative limits apply, the most stringent governs.
- s) NO_x and CO emissions from combusting ultra low sulfur diesel in Units S-1 through S-4 shall be calculated using CEM data. VOC, PM₁₀ and SO₂ emissions shall be calculated using the following emission factors:

Ultra Low Sulfur Diesel Emission Factors for Units S-1 through S-4 (lb/MMBtu)		
VOC	PM ₁₀	SO ₂
0.0047	0.022	0.0015

[Rule 210 § 302.1.b]

- 3) Emission Limitations for the Emergency Fire Pumps and Emergency Generator:

The Permittee shall not cause, allow or permit the emissions from the emergency fire pumps or the emergency generator to exceed 20 percent opacity, 3-minute average, except for short periods of time resulting from startup, shutdown, or unavoidable combustion irregularities which do not exceed three minutes in length.

[County Rule 300 §§ 301, 302]

B. OPERATIONAL REQUIREMENTS:

Operational Requirements for Units S-1 through S-4

- 1) The Permittee shall install, operate, and maintain Dry Low-NO_x (DLN) Burners on Units S-1 through S-4.
 [County Rule 210 § 302.1.b] [locally enforceable only]
- 2) The Permittee shall submit an approvable Operations and Maintenance (O&M) Plan to the Department for the DLN Burners required by these Permit

Conditions. The Plan shall be in a format acceptable to the Department and shall specify the procedures used to maintain the DLN Burners. The Permittee shall at all times comply with the latest version of the O&M Plan approved in writing by the Control Officer.

[County Rule 210 § 302.1.b] [locally enforceable only]

- 3) The Permittee shall install, operate, and maintain CO Oxidation Catalyst Emissions Control Systems (OX-ECS) on Units S-1 through S-4. Construction of the OX-ECS shall commence no later than 18 months after issuance of Significant Revision S00-009 and the OX-ECS shall be fully operational prior to startup of any equipment at the facility that utilized in netting calculations the Creditable Emissions Reduction generated by the OX-ECS from the individual Unit.

[County Rule 210 § 302.1.b] [locally enforceable only]

- 4) The Permittee shall submit an approvable O&M Plan to the Department for the OX-ECS required by these Permit Conditions. The Plan shall be in a format acceptable to the Department and shall specify the procedures used to maintain the OX-ECS. The O&M Plan shall be submitted within 30 days after the equipment covered has been started up. The Permittee shall at all times comply with the latest version of the O&M Plan approved in writing by the Control Officer.

[County Rule 210 § 302.1.b] [locally enforceable only]

Operational Requirements for the CEMS for Units S-1 through S-4

- 5) On and after the date on which the initial source emissions test required by Table 6 for either CO or NO_x occurs, the Permittee shall ensure that the CEMS for the relevant pollutant are in operation and monitoring unit emissions at all times that Units S-1 through S-4 combusts any fuel except during periods of calibration, quality assurance, preventive maintenance, repair, back-ups of data from the data acquisition and handling system, source emissions testing, or recertification.

[County Rule 210 §§ 302.1.c(1), (2)] [locally enforceable only]

- 6) On and after the date on which the initial source emissions test required by Table 6 for either CO or NO_x occurs, the Permittee shall ensure that the natural gas fuel flow meters are in operation and monitoring fuel flow at all times that Units S-1 through S-4 combusts natural gas except during periods of calibration, quality assurance, preventive maintenance, repair, back-ups of data from the data acquisition and handling system, source emissions testing, or recertification.

[County Rule 210 §§ 302.1.c(1), (2)] [locally enforceable only]

- 7) The Permittee shall submit an approvable O&M Plan to the Department for each CEMS for Units S-1 through S-4. The Plans shall be in a format acceptable to the Department and shall specify applicable operating parameters necessary to ensure continuous and accurate emissions

monitoring. The O&M Plan shall be submitted within 30 days after the initial source emissions test required in Permit Condition 19.F occurs.

[County Rule 210 § 302.1.b] [locally enforceable only]

- 8) The Permittee shall submit an approvable Quality Assurance (QA) Plan to the Department for each CEMS for Units S-1 through S-4. The Plans shall be in a format acceptable to the Department. The QA Plan shall be submitted within 30 days after the initial source emissions test required in Permit Condition 19.F occurs. The Permittee shall at all times comply with the latest version of the QA Plan approved by the Control Officer. A combined O&M Plan and QA Plan and/or a combined set of Plans for one or more CEM(S) may be submitted. The Permittee shall at all times comply with the latest version of the O&M and QA Plans approved by the Control Officer.

[County Rule 210 § 302.1.b] [locally enforceable only]

- 9) The Permittee shall at least quarterly conduct CEMS linearity checks and shall at least daily conduct calibration error checks for each CEMS for Units S-1 through S-4. All checks described in this paragraph shall be performed according to the procedures set forth in 40 CFR Part 75. This shall be reflected in the QA Plan.

[County Rule 210 § 302.1.b] [locally enforceable only]

- 10) The Permittee shall ensure that all calibration gases (including zero gases) are certified and current at all times. This shall be reflected in the QA Plan.

[County Rule 210 § 302.1.b] [locally enforceable only]

- 11) The Permittee shall develop and implement daily, monthly, quarterly, and annual maintenance checklists to ensure proper operation and accuracy of the CEMS. The checklists will be established as part of the O&M and QA Plans.

[County Rule 210 § 302.1.b] [locally enforceable only]

- 12) The Permittee shall develop CEMS adjustment factors for each Unit S-1 through S-4 and two load scenarios per unit: Scenario A at 60 to 80% of nameplate capacity, and Scenario B at greater than 80% of nameplate capacity.

- a) The eight adjustment factors (two factors per unit times four units) shall be determined by calculating the ratio of the average CEMS data for a period prior to and after the source tests to the results of the source test conducted as required in Table 6.
- b) For Scenario A, the CEMS comparison period shall be the two hours prior to and the two hours immediately following the source emissions test on a unit. The unit operations shall remain the same during the comparison periods and the source emissions test.
- c) For Scenario B, the CEMS comparison period shall be the four hours prior to and the four hours immediately following the source emissions test on a unit. The unit operations shall remain the same during the comparison periods and the source emissions test.
- d) The adjustment factors shall be applied to the CEMS data obtained from the time of the source emissions test until a new source emissions test is

conducted by multiplying the CEMS output times the adjustment factor to calculate the actual emission rate.

[County Rule 210 §302.1.b] [locally enforceable only]

- 13) The Permittee shall maintain records of all certifications, calibrations, testing, maintenance (including completed maintenance checklists), and repairs made to the CEMS.

[County Rule 210 §302.1.d]

Requirements for Units S-5A, S-5B, and S-6A During the Commissioning Period

- 14) The Permittee shall meet the following requirements for Units S-5A, S-5B, and S-6A during the commissioning period:
- a) The permit conditions in this Permit Condition 14 apply only during the commissioning period of Units S-5A, S-5B and S-6A. The commissioning period begins when fuel is first combusted in any part of the unit for any purpose and ends when the Permittee has completed the first air quality compliance source emissions test as required by Permit Condition 19.F for that unit; but no later than 180 days after initial startup.
 - b) The Permittee shall minimize emissions of CO and NO_x from Units S-5A, S-5B, and S-6A to the maximum extent practicable during the commissioning period.
 - c) At the earliest feasible opportunity in accordance with the recommendations of the equipment manufacturers and the construction contractor, Units S-5A, S-5B, and S-6A shall be tuned to minimize the emissions of CO and NO_x.
 - d) At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturers and the construction contractor, the Combined Cycle Systems shall be installed, adjusted, and operated to minimize the emissions of CO and NO_x.
 - e) The Permittee shall submit a plan to the Control Officer at least four weeks prior to first firing of any of Units S-5A, S-5B, and S-6A describing the procedures to be followed during the commissioning of the units. The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purpose of the activity. The activities described shall include, but not be limited to, the tuning of the Dry-Low- NO_x combustors, the installation and operation of the SCR and OX-ECS, the installation, calibration, and testing of the CO and NO_x CEMS, and any activities requiring the firing of the units without abatement by the SCR and/or OX-ECS. The Permittee shall maintain a log of the duration of the activities described in the plan.
 - f) Operation of any of Units S-5A, S-5B and S-6A without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR or OX-ECS fully operational. Upon completion of these activities, the Permittee shall provide written notice to the Control Officer.
 - g) The total mass emissions of NO_x, CO, VOCs, PM₁₀, sulfur dioxide, and hazardous air pollutants that are emitted by Units S-5A, S-5B, and S-6A upon initial start-up shall accrue towards the consecutive twelve-month emission limitations specified in Permit Condition 19.A.2, Table 2 and

shall be included in the annual emissions report specified in Permit Condition 16.A.

[County Rule 210 §§302.1.b, 302.1.d & 302.1.e]
[locally enforceable only]

Operational Requirements for Units S-5A, S-5B, and S-6A

- 15) At the earliest feasible opportunity in accordance with the recommendations of the equipment manufacturers and the construction contractor, the Unit S-5A, S-5B, and S-6A gas turbine combustors and duct burners shall be tuned to minimize emissions of NO_x and CO. This shall be documented in the log required by Condition 19.B.14.e.

[County Rule 210 §302.1.b] [locally enforceable only]

- 16) The Permittee shall install, operate, and maintain Selective Catalytic Reduction (SCR) systems as part of Units S-5A, S-5B, and S-6A.

- a) At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturers and the construction contractor, the Unit S-5A, S-5B, and S-6A SCR systems shall be installed, adjusted, and operated to minimize the emissions of NO_x. This shall be documented in the log required by Condition 19.B.14.e.
- b) The Permittee shall submit an approvable O&M Plan to the Department for the SCR systems required by these Permit Conditions. The Plan shall be in a format acceptable to the Department and shall specify the procedures used to maintain the SCR systems. The O&M Plan shall be submitted within 30 days after the equipment covered has been started up.
- c) The Permittee shall at all times comply with the currently approved version of the O&M Plan.
- d) The SCR systems shall be designed so they will not inject ammonia into the SCR systems when the inlet temperature to the catalyst is less than the Minimum Catalyst Temperature to be established as part of the O&M Plans.

[County Rule 210 §§302.1.b, 302.1.c(1)]

- 17) The Permittee shall install, operate, and maintain OX-ECS to reduce emissions of CO and VOC as part of Units S-5A, S-5B, and S-6A.

- a) At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturers and the construction contractor, the Unit S-5A, S-5B, and S-6A OX-ECS shall be installed, adjusted, and operated to minimize the emissions of CO. This shall be documented in the log required by Condition 19.B.14.e.
- b) The Permittee shall submit an approvable O&M Plan to the Department for the OX-ECS required by these Permit Conditions. The Plan shall be in a format acceptable to the Department and shall specify the procedures used to maintain the OX-ECS. The O&M Plan shall be submitted within 30 days after the equipment covered has been started up.
- c) The Permittee shall at all times comply with the currently approved version of the O&M Plan.

[County Rule 210 §§302.1.b, 302.1.c(1)]

Operational Requirements for the CEMS for Units S-5A, S-5B, and S-6A

- 18) The CEMS shall meet or exceed all applicable design, installation, operational, quality assurance, and all other applicable requirements of 40 CFR Parts 60 and 75, and therefore includes 40 CFR Part 60.47 a; 40 CFR Part 60.334 b; 40 CFR Part 60.334 c; 40 CFR Part 60, App. B, Spec. 2, 3; 40 CFR Part 60, App. F; 40 CFR Part 75.12; 40 CFR Part 75, Subpart C; and 40 CFR Part 75, App. A and B.
[County Rule 210 §302.1.c(1)]
- 19) Fuel flow monitors shall meet or exceed specifications contained in the current (as of July, 2000) American Gas Association Report Number 3 as required in 40 CFR 75, Subpart B.
[County Rule 210 §302.1.c(1)]
- 20) The Permittee shall ensure that the CEMS are in operation and monitoring unit emissions at all times that Units S-5A, S-5B, and S-6A combusts any fuel except during periods of calibration, quality assurance, preventive maintenance, repair, back-ups of data from the data acquisition and handling system (DAHS), or certification. Malfunctions shall be recorded and reported as required under 40 CFR Part 60 and Part 75, and therefore includes 40 CFR Part 60.47a(e).
[County Rule 210 §302.1.c(2)]
- 21) The Permittee shall ensure that the design, installation, operation, maintenance, O&M/QA Plan(s), and on-site spare parts inventory are sufficient to ensure that the CEMS meet the data capture requirements of Permit Condition 19.C and 40 CFR Parts 60 and 75, and therefore includes 40 CFR Parts 60 Appendix B, Appendix F, and 40 CFR 75.21.
[County Rule 210 §302.1.c(1)]
- 22) The Permittee shall submit an approvable O&M Plan to the Department for each CEMS required by these Permit Conditions. The Plans shall be in a format acceptable to the Department and shall specify applicable operating parameters necessary to ensure continuous and accurate emissions monitoring. The O&M Plan shall be submitted within 30 days after the equipment covered has been started up.
[40 CFR 75, Subpart C]
- 23) The Permittee shall submit an approvable QA Plan to the Department for each CEMS required by these Permit Conditions. The Plans shall be in a format acceptable to the Department. If the QA Plan has not been approved as part of the application for this permit, then the QA Plan shall be submitted within 30 days after the equipment covered has been started up. The Permittee shall at all times comply with the QA Plan.
[40 CFR 75, Subpart C]

- 24) A combined O&M Plan and QA Plan and/or a combined set of Plans for one or more CEM(S) may be submitted.
[40 CFR 75, Subpart C]
- 25) The Permittee shall at all times comply with the currently approved version of the O&M and QA Plans.
[40 CFR 75, Subpart C]
- 26) Within 90 days after commencement of commercial operations (as defined by 40 CFR 72.2), the Permittee shall certify the Units S-5A, S-5B, and S-6A CEMS with a Relative Accuracy Test Audit (RATA), linearity check, cylinder gas audit (CGA), bias check, 7-day calibration error check, and cycle time check.
[40 CFR 75.4(b)(2) and 75.20(c)]
- 27) The Permittee shall at least annually conduct a RATA and bias check on the Unit S-5A, S-5B, and S-6A CEMS. The Permittee shall at least quarterly conduct linearity checks and cylinder gas audits (CGA) as required by 40 CFR Part 60 Appendix F 5.1.1. and 40 CFR Part 60 Appendix F 5.1.2. The Permittee shall at least daily conduct calibration error and drift checks on the Unit S-5A, S-5B, and S-6A CEMS as required by 40 CFR Part 60 Appendix F 4.1. The Permittee may suspend daily calibration error and drift checks on the unit S-5A, S-5B, and S-6A CEMS for periods where 14 or more days of continuous non-operation is scheduled for the corresponding unit. Scheduled continuous non-operation must be indicated by the existence of an approved generation outage for 14 or more days. Once calibration error and drift checks have not been performed during the previous 24-hour period for a CEMS, calibration error and drift checks must be performed for that CEMS prior to initiation of fuel combustion in the corresponding unit. More frequent audits and checks shall be conducted as required by 40 CFR Parts 60 Subpart A, Appendix F; and 40 CFR 75, Appendix B.
[40 CFR 60 Appendix F 4.1, 5.1.1 and 5.1.2 Appendix B]
[40 CFR 60 Subpart A, 40 CFR 75 Appendix B]
- 28) The Permittee shall ensure that all calibration gases (including zero gases) are certified and current at all times.
[40 CFR 60.47a(i)(2), and 40 CFR 75.22(c)]
- 29) The Permittee shall re-calibrate any CEMS after any maintenance activity that could affect the system calibration and shall re-certify as required by and within the time periods required by 40 CFR 75.20(b) whenever the Permittee makes a replacement, modification, or change that may significantly affect the ability of the system to accurately measure or record emissions.
[40 CFR 75.20(b)]
- 30) The Permittee shall develop and implement daily, monthly, quarterly, and annual maintenance checklists to ensure proper operation and accuracy of the CEMS. The checklists will be established as part of the O&M and QA Plans.
- 31) The Permittee shall maintain records of all certifications, calibrations, testing, maintenance (including completed maintenance checklists), and repairs made to the CEMS.

[County Rule 210 §§302.1.b, 302.1.c(1)]
[40 CFR 60 Subparts Da and GG, and 60.7]
[40 CFR 75 Subparts A, B, C, Appendix A, Appendix B]

Operational Requirements for the Cooling Towers

- 32) Existing cooling tower CT1 shall at all times be equipped and maintained with high efficiency drift eliminators certified by the cooling tower vendor to achieve less than 0.0005 percent drift. The TDS content of the cooling water in cooling tower CT1 shall not contain more than 6,000 milligrams per liter (mg/l) TDS. Each cooling tower CT6 and CT5 shall at all times be equipped and maintained with high efficiency drift eliminators certified by the cooling tower vendor to achieve less than 0.0005 percent drift. The TDS content of the cooling water in the cooling towers CT6 and CT5 shall not contain more than 3,600 mg/l TDS.
[County Rule 210 § 302.1.b] [County Rule 240 § 305.1.a]

Operational Requirements for the Diesel Engines

- 33) The Permittee shall operate the Diesel Fire Water Pump Engines and Emergency Generator Engine only for emergency conditions or routine maintenance checks. Total rolling twelve-month use of each of the engines (except for the Onan Fire Pump Engine), excluding operations for emergency conditions, shall not exceed 37.5 hours.
An emergency, for these equipment, is defined as when normal power line or natural gas service fails, for the emergency pumping of water, for when low water pressure in the fire suppression system is triggered, for unforeseen flood or fire or life threatening situation, or for similar situations accepted as an emergency by the Control Officer and Administrator. Under no circumstances may these engines operate to supplement a primary power source when the load capacity or rating of the primary power source has been either reached or exceeded.
[County Rule 240 § 305.1.b]

C. MONITORING REQUIREMENTS:

- 1). The Permittee shall hourly monitor and record the hours of operation and operating mode (startup, shutdown, or normal) of Units S-5A, S-5B, and S-6A; Units S-5A, S-5B, and S-6A exhaust temperature prior to entering the SCR systems and the OX-ECS; the amount of natural gas combusted in individual Units S-1 through S-4 and Units S-5A, S-5B, and S-6A (including individually the Duct Burners); and the actual heat input of Units S-5A, S-5B, and S-6A (including individually the Duct Burners). The Permittee shall monthly calculate and record the twelve-month total hours of operation in each mode for Units S-5A, S-5B, and S-6A. The Permittee may monitor the combined fuel usage in Units S-1 through S-4 instead of individually. The Permittee shall monthly calculate and record the emissions from Units S-1 through S-4 and S-5A, S-5B, and S-6A and shall monthly compare the calculated emissions to the limits contained in the Permit.
[County Rule 210 §§ 302.1.c(1) and 302.1.c (2)]

- 2). The Permittee shall record the actual hours of operation and the reason for operation of the diesel fire water pump engines and the diesel emergency generator and the nature of the emergency or maintenance check that caused the engines to be used. The Permittee shall monthly calculate the twelve-month total hours of operation.

[County Rule 210 § 302.1.c(2)]

- 3). Within 90 days after commencement of commercial operation as defined by 40 CFR 72.2, the Permittee shall install, calibrate, certify, and operate a CEMS for Units S-5A, S-5B, and S-6A exhaust stacks to continuously measure CO, NOx, and either carbon dioxide or oxygen content of the exhaust stream. The NOx CEMS shall be installed in accordance with 40 CFR 60 Subpart Da, Section 60.47a(c)(1) and 40 CFR 75 requirements. Hourly average, rolling three-hour, and rolling 24-hour average values shall be continuously recorded.

[County Rule 210 § 302.1.c(2)][40 CFR 60 Subpart Da, §60.47a(c)(1)]

[40 CFR Part 75.4]

- 4). Prior to 180 days before the initial source emissions test required by Table 6 for NOx occurs, the Permittee shall design, install, and operate a CEMS for NOx emissions and either carbon dioxide or oxygen content of the exhaust stream from Units S-1 through S-4. Such installation shall be consistent with 40 CFR Part 60 and 40 CFR Part 75 wherever possible.

[County Rule 210 § 302.1.c(1)] [locally enforceable only]

- 5). Prior to 180 days before the initial source emissions test required by Table 6 for CO occurs, the Permittee shall design, install, and operate a CEMS for CO emissions and either carbon dioxide or oxygen content of the exhaust stream from Units S-1 through S-4. Such installation shall be consistent with 40 CFR Part 60 and 40 CFR Part 75 wherever possible.

[County Rule 210 § 302.1.c(1)] [locally enforceable only]

- 6). Prior to 180 days before the initial source emissions test required by Table 6 for either NOx or CO occurs, natural gas fuel flow monitors shall be installed on Units S-1 through S-4 for which a source test is required. The fuel flow meters shall meet or exceed specifications contained in the current (as of July, 2000) American Gas Association Report Number 3.

[County Rule 210 § 302.1.c(1)] [locally enforceable only]

- 7). In accordance with Permit Condition 19.C.4 and 19.C.5, the Permittee shall install, calibrate, certify, and operate a continuous emission monitor (CEMS) for Units S-1 through S-4 to continuously measure CO, NOx, and either carbon dioxide or oxygen content of the exhaust stream. Hourly average values shall be continuously recorded by the CEMS. The continuous emission monitors for Units S-1 through S-4 must obtain valid data for at least 18 of every 24 hours in at least 22 of every 30 consecutive days of operation.

[County Rule 210 §302.1.c (2)]

- 8). On and after the date on when initial startup occurs, and prior to when the initial source emissions test required by Permit Condition 19.F. for either CO or NOx

occurs, the Permittee shall ensure that the CEMS for the relevant pollutant are in operation and calibrated and are monitoring unit emissions at all times that Units S-5A, S-5B, and S-6A combusts any fuel except during periods of calibration, quality assurance, preventive maintenance, repair, back-ups of data from the data acquisition and handling system, source emissions testing, or recertification.

[County Rule 210 § 302.1.c(2)] [locally enforceable only]

- 9) The CEMS for Units S-5A, S-5B, and S-6A must obtain valid data for at least 18 of every 24 hours in at least 22 of every 30 consecutive days of operation.

[County Rule 210 § 302.1.c(2)][County Rule 360,
40 CFR 60 Subpart Da, §60.47a(f)]

- 10) Prior to the date when initial startup occurs, the Permittee shall install, calibrate, certify, and operate natural gas fuel flow meters to individually monitor the unit-specific fuel flow to Units S-5A, S-5B, and S-6A (including individually Duct Burners).

[County Rule 210 § 302.1.c(1)][40 CFR Part 75 Subpart B]

- 11) The Permittee shall monitor for compliance with the sulfur dioxide limits of this permit by obtaining and recording the sulfur content of the pipeline quality natural gas used in Units S-1 through S-4 and S-5A, S-5B, and S-6A using the following custom monitoring schedule:

- a) The Permittee shall monitor sulfur content of the pipeline quality natural gas at least once every calendar quarter.
- b) If at any time a fuel sulfur analysis indicates noncompliance with the fuel sulfur limit in Condition 18.B.1 of this Permit, the Permittee shall notify the Administrator and the Department of such excess emissions within one week of the analysis.
- c) In the event of such noncompliance, the Permittee shall conduct fuel sulfur monitoring weekly until notified by the Administrator and the Department that less frequent monitoring is acceptable.
- d) The Permittee shall determine compliance with the sulfur content limit in Condition 18.B.1 of this Permit by using measurement methods ASTM Method D172-80, ASTM Method D3031-81, ASTM Method D3246-81, or ASTM Method D4084-82 either at the site or upstream or downstream of the site. If the applicable ranges of these ASTM methods are not adequate to measure the levels of sulfur, dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator and the Control Officer.

[County Rule 210 § 302.1.c(2)][40 CFR 60.335(d), (e), §334(b)(2)]

- 12) The Permittee shall obtain and record the Gross Caloric Value of the natural gas used in Units S-1 through S-4 and S-5A, S-5B, and S-6A as required by 40 CFR Part 75, Appendix D at least as frequently as required by 40 CFR Part 75, Appendix D and Appendix G.

[County Rule 371] [40 CFR 75 Subpart D, Subpart G]

- 13) Within 90 days after the commencement of commercial operations for Units S-5A, S-5B, and S-6A as defined by 40 CFR 72.2, the Permittee shall install, certify, and operate on the SCR system monitors to measure the ammonia injection rate. The flow meters will be sampled by a data acquisition system at a frequency of no less than once every 15 minutes and averaged into rolling 24 hours periods. These data will be used to verify compliance with the ammonia emission limits of Table 5 and the emissions testing requirements of Table 7.

[County Rule 210 §§ 302.1.c(1), 302.1.c(2)]

- 14) The Permittee shall monthly inspect each Wet Cooling Tower drift eliminator for proper installation, maintenance, and operation. The results of the inspection shall be recorded in a facility log.

[County Rule 210 § 302.1.c(2)]

- 15) The Permittee shall daily monitor and record the conductivity of the water in each Cooling Tower and shall monthly monitor and record the TDS content of the water in each Cooling Tower.

[County Rule 210 § 302.1.c(1)]

- 16) The Permittee shall monthly conduct a facility walk-through and observe visible emissions from Units S-1 through S-4 and S-5A, S-5B, and S-6A exhaust stacks and the diesel-fueled Fire Water Pump Engines and Emergency Generator Engine. The Permittee shall log the visual observations, including the date and time when that reading was taken, results of the reading, name of the person who took the reading and any other related information.

[County Rule 210 § 302.1.c(1) and SIP Rule 30]

- 17) If visible emissions are observed from any device capable of emitting any air contaminant other than condensed water containing no more than analytical trace amounts of other chemical elements or compounds and the facility has never had an opacity violation in the 12 months preceding the observation; the Permittee shall obtain an opacity reading conducted in accordance with EPA Reference Method 9 by a certified visible emissions (VE) reader. This reading shall be taken within 3 days of the observance of visible emissions and taken weekly thereafter during each week that the unit is in operation until there are no visible emissions. If the problem is corrected before three days has passed, and no emissions are visible, the Permittee shall not be required to conduct the certified reading. The Permittee shall log the visual observations, including the date and time when that reading was taken, results of the reading, name of the person who took the reading and any other related information. If an opacity violation has occurred at the facility in the 12 months preceding the observation of visible emissions, the required EPA Reference Method by a certified visible emissions (VE) reader shall be taken within 24 hours of the observation of visible emissions.

[County Rule 210 §302.1.c (2)]

- 18) Opacity Readings

- a) Opacity shall be determined by observations of visible emissions conducted in accordance with 40 CFR Part 60 Appendix A, Method 9.

[40 CFR 60.11.b] [County Rule 300 § 501]

- b) Opacity of visible emissions from intermittent sources as defined by County Rule 300 § 201 shall be determined by observations conducted in accordance with 40 CFR Part 60 Appendix A, Method 9, except that at least 12 rather than 24 consecutive readings shall be required at 15-second intervals for the averaging time.

[County Rule 300 §§ 501 and 502] [locally enforceable only]

- 19) The Permittee shall monitor for compliance with the particulate matter emissions limits of the permit by taking a visual emission observation of the stack emissions from each turbine during each week of operation that the equipment was used more than 10 hours. If emissions are visible, the Permittee shall obtain an opacity reading conducted in accordance with 40 CFR Part 60 Appendix A, Method 9 by a certified reader. This reading shall be taken within 3 operating days of the visible emission and taken thereafter weekly for each week when operations occur until there are no visible emissions. If the condition causing the visible emissions is eliminated before three days have passed, and no emissions are visible, the Permittee shall not be required to conduct the certified reading. If visible emissions are present, the Control Officer may require emissions testing by other approved Reference Methods such as 40 CFR 60 Appendix A Method 5 to monitor for compliance with the particulate matter emission limits of these Permit Conditions.

For purposes of these Permit Conditions, a certified visible emissions reader shall mean an individual who, at the time the reading is taken, is certified according to the County Rule Appendix C, Section 3.4.

[County Rule 210 §302.1.c(2) and SIP Rule 31]

- 20) The Permittee shall maintain a log of complaints of odors detected off-site. The log shall contain a description of the complaint, date and time that the complaint was received, and if given, name and/or phone number of the complainant. The logbook shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective actions that were taken.

[County Rule 210 § 302.1.c(2)]

- 21) The Permittee shall maintain a file of all measurements as required by County Rule 210 §302.1.d, including CEMS emission records; operating parameter records; all CEMS performance evaluations; all CEMS or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 75 Subpart F and 40 CFR 60.49a recorded in a permanent form for at least five years.

[40 CFR 60.49a][40 CFR Part 75 Subpart F][County Rules 210 and 371]

- 22) The Permittee shall keep all the records of the fuel supplier certification for the diesel fuel being combusted for at least five years. The supplier certification shall include:
 - a) the name of the supplier,
 - b) the sulfur content of the fuel,
 - c) the method used to determine the sulfur content of the fuel,
 - d) the date that the fuel was delivered to the site, and

- e) the date that the fuel was sampled for sulfur content.
- f) a bill of lading or receipt noting that a fuel delivery is EPA low sulfur diesel is sufficient to satisfy requirements a-e above.

[County Rule 210 § 302.1.d]

23) In addition to summary information provided in the Compliance Report submitted under Condition 19.E.4, the Permittee shall maintain on site at least the following information that demonstrates the conclusions reached in the Compliance Report:

- a) Hours of operation and amount and type of fuel burned each hour for each Unit; and hours of operation of each diesel engine.

[County Rules 210 § 302.1.d]

- b) Data, as applicable, from emissions monitoring and reporting requirements for each Duct Burner.

[County Rules 360 §301 and 40 CFR 60.47a and 60.49a]

- c) Dates on which visible emissions observations were taken, the test method used, and the results of the observations.

- d) CEMS data related to the emission limits contained in this permit, calibrations, quality assurance, performance demonstrations, and certifications for the reporting period.

- e) Stack emissions test results related to emission limits and/or operational requirements in this Permit.

- f) Cooling tower inspection log and results of conductivity and TDS monitoring.

- g) Odor log.

- h) Any other records and reports required by any Permit Condition contained in this Permit.

[County Rule 210 § 302.1.d]

D. SPECIFIC REQUIREMENTS FOR THE USE OF ULTRA LOW SULFUR DIESEL IN UNITS S-1 THROUGH S-4

- 1) The Permittee shall not combust any fuel other than pipeline quality natural gas in units S-1 through S-4 unless previously authorized by the Arizona Corporation Commission.

[Permittee's voluntary requirement][locally enforceable only]

- 2) While combusting Ultra Low Sulfur Diesel, the Permittee shall limit the hours of operation for testing, maintenance and training to 36 hours per unit per year.

[County Rule 322 §104.3][locally enforceable only]

- 3) The Permittee shall notify the Control Officer verbally no later than 24 hours after declaration of an emergency that necessitates the use of ultra low sulfur diesel in any of the Units S-1 through S-4. This notification shall also be followed by a written report within 48 hours of initial usage, which shall also

include identification of the nature of the emergency, initial dates of usage, and the expected dates of usage.

[County Rule 322 §307][locally enforceable only]

- 4) The Permittee shall keep records of the amount of ultra low sulfur diesel used, the dates and hours of operation, the reason for operation of Units S-1 through S-4 on ultra low sulfur diesel and the nature of the emergency, testing, maintenance or training that caused ultra low sulfur diesel to be used in the units.

[County Rule 322 §501.3][locally enforceable only]

- 5) The Permittee shall submit fuel receipts from the fuel supplier, fuel supplier certifications or test records demonstrating that the diesel fuel used in Units S-1 through S-4 contains less than or equal to 0.0015 percent sulfur by weight if requested by the Control Officer.

[County Rule 322 §503.1][locally enforceable only]

E. REPORTING REQUIREMENTS:

- 1) The Permittee shall file a written notice with the Control Officer as described in 40 CFR 60.4, 40 CFR 60.7, 40 CFR 60.19, 40 CFR 60.48c(a), and 40 CFR 60.49b(a) as follows:
 - a) A notification of commencement of construction of Units S-5A, S-5B, and S-6A postmarked within 30 days of such date.
 - b) A notification of the actual date of initial startup of the Units S-5A, S-5B, and S-6A postmarked within 15 days of such dates.
 - c) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under 40 CFR 60.14(e). This notice shall be postmarked within 60 days or as soon as commenced and shall include information describing the precise nature of the change, present and proposed emissions control systems, productive capacity of the facility before and after the change, and the expected completion date of the change.
 - d) In accordance with 40 CFR 60.4, the notifications required by this Permit Condition shall be sent in duplicate to the Director, Air and Waste Management Division, Region IX of the United States Environmental Protection Agency (USEPA). A copy of the notifications shall be sent to the Control Officer.

[County Rule 360 § 301] [40 CFR 60.4(a), (b), (D)]

[40 CFR 60.7(a), (b), (f)] [40 CFR 60.14(e)] [40 CFR 60.19]

- 2) The Permittee shall report the information required by 40 CFR 75.61 (Notifications), 75.62 (Monitoring Plan Submittals), 75.63 (Initial Certification or Recertification Application Submittals) and 75.64 (Quarterly Reports) for Existing Units S-1 through S-4 and Units S-5A, S-5B, and S-6A in accordance with 40 CFR Part 75 Subpart G. The Permittee shall electronically report to EPA the data and information as allowed by 40 CFR Part 75, Subpart G. Submittals shall include facility data, unit emission data, monitoring data, control equipment data,

monitoring plans and quality assurance data and results as required by 40 CFR Part 75.

[40 CFR 75 Subpart G, County Rules 210 and 371]

- 3) If the Permittee elects to determine compliance with the NO_x emission limit at 40 CFR 60.44a(d)(1) using the procedure set forth in 40 CFR 60.46a(k)(2), unless a waiver is obtained from the USEPA and accepted by the Control Officer, the Permittee shall report NO_x concentrations for each Duct Burner to the Control Officer semiannually for each six month period post marked no later than the 30th day following the end of each six month period as required by 40 CFR 60.7(c), 40 CFR 60.7(d), 40 CFR 60.49a and 40 CFR 60.47a(c)(2) for the duct burners as follows:
- a) The initial performance evaluation test data of the CEMS and any subsequent performance evaluation test data.
[40 CFR 60.49a(a)]
 - b) For NO_x the following information is reported to the Administrator for each 24-hour period:
 - (1) Calendar date.
 - (2) The average NO_x emission rates (lb/million Btu).
 - (3) Each 30 successive duct burner operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and, description of corrective actions taken.
 - (4) Identification of the duct burner operating days for which pollutant or diluent data have not been obtained by an approved method for at least 18 hours of operation of the duct burner; justification for not obtaining sufficient data; and description of corrective actions taken.
 - (5) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction, or other reasons, and justification for excluding data for reasons other than startup, shutdown, or malfunction.
 - (6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
 - (7) Identification of times when hourly averages have been obtained based on manual sampling methods.
 - (8) Identification of the times when the pollutant concentration exceeded full span of the CEMS.
 - (9) Description of any modifications to the CEMS which could affect the ability of the CEMS to comply with Performance Specifications required by 40 CFR Part 75.
 - (10) For purposes of this subsection, a "duct burner operating day" is a 24-hour period beginning at 12:01 AM and ending at 12:00 midnight during which natural gas is combusted in a duct burner for the entire 24 hours.
[40 CFR 60.7(c)][40 CFR 60.7(d)][40 CFR 60.49a(b)]
 - c) For any periods for which NO_x emissions data are not available, the Permittee shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system are to be compared with

operation of the control system before and following the period of data unavailability.

[40 CFR 60.7(d)][40 CFR 60.49a(f)]

- d) The Permittee shall submit a signed statement indicating whether:
 - (1) The required CEMS calibration, span, and drift checks or other period audits have or have not been performed.
 - (2) The data to show compliance was or was not obtained in accordance with approved methods and procedures and is representative of plant performance.
 - (3) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
 - (4) Compliance with the standards has or has not been achieved during the reporting period.

[40 CFR 60.7(d)] [40 CFR 60.49a(g)]

- e) The Permittee shall submit an excess emissions report for NO_x emissions from each CEMS performance report as required by 40 CFR 60.7(c) and the summary report form required by 40 CFR 60.7(d). The reports shall be prepared in accordance with 40 CFR 60.7(c)(1), (2), (3) and 40 CFR 60.7(d). When no excess emissions have occurred or the CEMS have not been inoperative, repaired, or adjusted, such information shall be stated in the reports. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and the CEMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form specified in 40 CFR 60.7(d) shall be used and no excess emissions report shall be required.

[40 CFR 60.7(c) and (d)]

- f) The Permittee may submit electronic reports for the information required by this Permit Condition upon coordination with the Control Officer to develop the required format and including a signed statement that indicates whether compliance with the emissions standards and minimum data requirements of this Permit were achieved during the reporting period.

[40 CFR 60.49a(j)]

- 4) The Permittee shall file a semiannual compliance report starting from this permit issuance date within 30-days of the end of the 6-month period to the Division with attention to: Large Sources Compliance Supervisor including the following information:
 - a) Summary of hours of the operation for each turbine for the reporting 6-month period;
 - b) Summary of the opacity readings including the test method used and the observed opacity;
 - c) Fuel supplier certification regarding sulfur content for all fuel oil delivered during reporting period;
 - d) Summary of the odor complaint log if any complaints were received during the reporting period.
 - e) Description of and an explanation for any deviations from any permit condition at any time.

- f) Certification that construction has not been discontinued or suspended for 18 months or more. Once construction is complete, a certification that the facility has been constructed as required by this Permit and construction has been completed.

[County Rule 210 § 305.1.c(1)] [locally enforceable only]

F. TESTING REQUIREMENTS:

Conditions 1, 2, and 3 apply to all emissions testing required by this Permit Condition:

- 1) The Permittee shall submit an approvable test protocol to the Department, for review and approval at least 30 days prior to the emissions test. A fee for each stack to be tested shall be submitted with the test protocol as required by County Rule 280.

[County Rule 270 and 280 § 301.5]

- 2) The Permittee shall notify the Department in writing at least two weeks in advance of the actual time and date of the emissions test so that the Division may have a representative attend.

[County Rule 270 § 404]

- 3) The results of all source test reports shall be submitted to the Department within 30 days after completion of the emissions test. The report shall summarize the results of the testing in sufficient detail to allow a compliance determination and demonstration of the appropriate ammonia Molar Ratio value to be made.

[County Rule 270 §401]

Note: All protocols, notifications and reports required by this permit condition should be addressed to the attention of the Compliance Testing Supervisor.

- 4) Testing Requirements for Units S-1 through S-4:
The Permittee shall develop CEMS adjustment factors required by Permit Condition 19.B.12 by conducting stack emissions tests as specified in Table 6.

[County Rule 210 § 302.1.c(2) and (3)] [locally enforceable only]

Table 6
Stack Emissions Test Requirements for Existing Units

Device to be Tested	Pollutant	Method	Frequency
Each of Units S-1 through S-4 when operating at Base Load between 95% to 105% of nameplate capacity of the Unit	NO _x CO	Method 7e Method 10	Initial Source Test and at least every four (4) calendar years thereafter on a rotating schedule such that one unit is tested every calendar year and no more than four (4) calendar years elapses between tests for any one unit unless a physical change as described in Permit Condition 19.F.4.b occurs.
Each of Units S-1 through S-4 when operating at between 60% to 80% of nameplate capacity of the Unit	NO _x CO	Method 7e Method 10	Initial Source Test and at least every four (4) calendar years thereafter on a rotating schedule such that one unit is tested every calendar year and no more than four (4) calendar years elapses between tests for any one unit.
One of Units S-1 through S-4 when operating at Base Load between 95% to 105% of nameplate capacity of the Unit	HAPs (formaldehyde, acetaldehyde, toluene, xylene, ethylbenzene, and hexane)	Method(s) specified by the Control Officer	Initial Source Test. If annualized total HAPs exceed 2.5 tpy or if any single HAP exceeds 1 tpy from one unit, the additional units shall be tested.

[County Rule 210 §302.1.c(2) and (3)] [locally enforceable only]

- a) The "Initial Source Test" for units S-1 through S-4 shall be conducted no later than 120 days prior to startup of Unit S-5A, S-5B or S-6A. If the DLN Burners or OX-ECS are not used to obtain Creditable Emissions Reductions from a given Unit within the same 120 day period, two different "Initial Source Tests" may have to be conducted in order to meet the 120 day requirement, one for CO and one for NO_x.
- b) If the Permittee changes the physical configuration of the exhaust duct, exhaust stack, CEMS location or makes any other physical change that could affect the CEMS results, a new source test and CEMS comparison shall be conducted within 90 days of the physical change. This source test will then re-start the four (4) year testing cycle.
- c) "Method" refers to 40 CFR Part 60 Appendix A emissions testing methods.

- d) Nameplate capacity means the capacity of the Unit when it is operating at combustion temperatures of 2,020 degrees F and ambient conditions of 20 degrees Celsius and one atmosphere ambient pressure.
- 5) Testing Requirements for Units S-5A, S-5B, and S-6A:
The Permittee shall monitor for compliance with the emission limits of Tables 3 and 5 by conducting stack emissions tests as specified in Table 7.
[County Rule 210 § 302.1.c(2) and (3)] [locally enforceable only][40 CFR 60.8]

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Table 7
Stack Emissions Test Requirements for New Units

Device to be Tested	Pollutant	Method	Frequency
Unit S-5A, S-5B, and S-6A when Operating with Duct Burners ON and 95% to 105% of rated capacity of the Combined Cycle System	NO _x CO PM ₁₀ VOC	Method 7e Method 10 Method 5 and 202 Method 25a and 18	Startup and every calendar year thereafter for VOC and PM ₁₀ , every five (5) calendar years thereafter for NO _x and CO.
Unit S-5A, S-5B, and S-6A when Operating with Duct Burners ON and 95% to 105% of rated capacity of the Combined Cycle System	Ammonia	Method specified by the Control Officer	Startup and every five (5) calendar years thereafter or, for any individual Combined Cycle System, within ninety (90) days of the ammonia (NH ₃) injection rate exceeding the value determined by Permit Condition 19.F.6 in a single Combined Cycle System and five (5) calendar years thereafter, whichever is more frequent
Unit S-5A, S-5B, and S-6A when Operating with Duct Burner OFF and 95% to 105% of rated capacity of the Gas Turbine	NO _x CO PM ₁₀ VOC	Method 7e Method 10 Method 5 and 202 Method 25a and 18	Startup and every calendar year thereafter for VOC and PM ₁₀ , every five (5) calendar years thereafter for NO _x and CO; unless all emission limits in Tables 3 and 5 of this Permit are met with Duct Burners ON
Unit S-5A, S-5B, and S-6A when Operating with Duct Burner OFF and 60% to 80% of rated capacity of Gas Turbine	NO _x CO	Method 7e Method 10	Upon Initial Startup
Unit S-5A, S-5B, and S-6A when Operating with Duct Burner OFF and 60% to 80% of rated capacity of Gas Turbine	PM ₁₀ VOC	Method 5 and 202 Method 25a and 18	Startup and every calendar year thereafter
Unit S-5A, S-5B, and S-6A when Operating with Duct Burner ON and 95% to 105% of rated nameplate capacity.	HAPs (formaldehyde, acetaldehyde, toluene, xylene, ethylbenzene, and hexane)	Method(s) specified by the Control Officer	Startup. If annualized total HAPs exceed 2.5 tpy or if any single HAP exceeds 1 tpy from one turbine and duct burner pair, the additional turbine and duct burner pairs shall be tested.

[County Rule 210 § 302.1.c(2) and (3)] [locally enforceable only][40 CFR 60.8]

- a) For purposes of testing frequency, “startup” is defined as “Within 60 days of achieving maximum production rate of the Combined Cycle System, but not later than 180 days after actual startup”.

- b) "Method" refers to 40 CFR Part 60 Appendix A emissions testing methods. Alternate test methods may be approved by the Control Officer on a case-by-case basis.
- c) Rated capacity means the nameplate capacity specified in Appendix A of this permit adjusted for current ambient conditions.
- 6) The ammonia (NH₃) injection rate that triggers additional source testing as required in Table 7 shall be determined as follows:
 - a) The Trigger Rate is established by the following equation:
$$\text{Trigger Rate} = 30.7 + 1.62 \times 17.034 \times \text{MR}$$
Where:
Trigger Rate is pounds ammonia (NH₃) per hour for one Combined Cycle System, 30.7 is the pounds of ammonia emitted at 10 ppm ammonia slip, 1.62 is the moles of NO_x to be reacted at full load with Duct Burners ON, 17.034 is the molecular weight of ammonia, and MR is the Molar Ratio of NH₃ to NO_x.
 - b) A default Molar Ratio (MR) of 1.50 shall be used unless an alternative MR is determined by the Control Officer or the Administrator to be more representative. The initial (upon startup), follow-up stack emissions tests, and/or other emissions monitoring data (whether or not required in Table 7) may be used if acceptable to the Control Officer to determine an alternative MR.

[County Rule 210 § 302.1.c (2) and (3)]

20. OTHER REQUIREMENTS

A. PERMIT SHIELD:

Compliance with the conditions of this Permit shall be deemed compliance with the applicable requirements identified in Appendix B of this Permit. The Permit Shield extends to the non-applicable requirements identified in Appendix C of this permit. The Permit Shield shall not extend to minor permit revisions.

[County Rule 210 §§ 405.7, 407]

B. COMMENCEMENT OF CONSTRUCTION:

The Control Officer shall terminate the authority to construct for equipment where construction has not yet commenced under Permit Revision S01-014 if construction is not begun within 18 months of issuance, or if during the construction, work is suspended for more than 18 months.

[County Rule 240 § 304.4]

C. OFFSET PLAN

- 1) The Permittee shall confirm that the following emission offsets have been certified prior to the initial startup date of Units S-5A, S-5B, and S-6A:
 - a) Total PM10 emission offsets of 193-263 tons per year, depending on distance of offsets from facility. This breaks down to 63 – 86 tons per year of PM10 emission offsets for the one-on-one configuration (Unit S-6A and CT6) and 130 – 177 tons per year of PM10 emission offsets for the two-on-one configuration (Units S-5A & 5B and CT5).
 - b) VOC emission offsets of 72 tons per year. This breaks down to 24 tons per year of VOC emission offsets for the one-on-one configuration (Unit S-6A and CT6) and 48 tons per year of VOC emission offsets for the two-on-one configuration (Units S-5A & 5B and CT5).
- 2) The Applicant shall submit to the Control Officer proof of installation of required control technologies or methodologies to implement these emission reductions 10-days prior to the first initial start-up of any unit covered by this permit. Any change to the proposed Air Emissions Offset Plan submitted as part of the permit application shall be submitted for approval by the Control Officer.

[County Rule 240 § 306.1]

D. ACID RAIN PERMIT:

- 1) The Acid Rain Phase II Permit Application and Certificate of Representation signed by the Designated Representative on June 5, 2002 and submitted to the Control Officer, shall constitute the Permittee's Acid Rain Permit for Units S-5A, S-5B, and S-6A.
- 2) The Permittee shall comply with the Acid Rain Permit, 40 CFR Parts 72, 73, and 75, and the Acid Rain requirements of Permit Condition 6.A.
- 3) The relevant Conditions of this Permit and the Acid Rain Permit, including but not limited to, the Allowable Emission Limits, Operation Requirements, Monitoring/Recordkeeping Requirements, Reporting Requirements, and Testing Requirements shall constitute the Compliance Plan required by 40 CFR Part 72 Subpart D.
- 4) The Permittee shall hold SO₂ Allowances as of the allowance transfer deadline in each affected unit's compliance subaccount not less than the total annual actual

emissions of SO₂ for the previous calendar year from each affected unit as required by the Acid Rain Program.

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21. PERMIT CONDITIONS FOR SURFACE COATING OPERATIONS AS SUPPORT ACTIVITIES FOR THIS FACILITY

(NOTE: THIS DOES NOT INCLUDE ARCHITECTURAL COATINGS WHICH IS COVERED ELSEWHERE IN THESE PERMIT CONDITIONS):

A. OPERATIONAL LIMITATIONS:

- 1) The Permittee shall operate spray coating equipment inside an enclosure which has at least three sides a minimum of eight feet in height, designed to contain not less than ninety-six (96%) by weight of the overspray and able to contain any object or objects being coated. Spray shall be directed in a horizontal or downward pointing manner so that overspray is directed at the walls or floor of the enclosure. No spraying shall be conducted within three feet of any open end and/or within two feet of the top of the enclosure.

[A.A.C. R.18 -2-727 A, SIP Rule 34.E, County Rule 315 § 301.1]

- 2) Any spray booth or enclosure with forced air exhaust must have a filtering system with an average overspray removal efficiency of at least 92% by weight for the type of material being sprayed. No gaps, sags or holes shall be present in the filters and all exhaust must be vertically discharged into the atmosphere. Spray Booths or enclosures utilizing a water curtain, waterfall or other means to capture particulates in a liquid medium shall effectively remove at least 92% of the overspray and be operated in a manner consistent with the manufacture's specifications to achieve such efficiency for the type of material being sprayed.

[County Rule 315 § 301.2] [locally enforceable only]

- 3) The controls required in County Rule 315 Section 301 shall not apply:
 - a) To the spray coating of buildings or structures with dimensions greater than 10'W X 25'L X 8' H, including appurtenances and any other ornamental objects that are not normally removed prior to coating. Buildings less than 10'W X 25'L X 8'H which are fixed in a permanent location and cannot easily be moved into an enclosure or spray booth are also exempt.
 - b) To enclosures and spray booths located entirely in a completely enclosed building providing that any vents or openings do not allow overspray to be emitted into the outside air.
 - c) To any coating operations utilizing only hand-held aerosol cans.
 - d) To any spot painting.

[A.A.C. R.18 -2-727 A, SIP Rule 34.E, County Rule 315 § 302]

- 4) The Permittee shall not apply any surface coatings, including any VOC-containing materials added to the original coating supplied by the manufacturer, which contain VOC in excess of the limits in Table I of the Rule 336 § 301. However, the provisions of the Rule 336 § 301 and 302 do not apply:
 - a) To hand-held aerosol can operations.
 - b) To touch-up or repair-coating operations.
 - c) To low usage coatings which in aggregate of all formulations do not exceed 55 gallons (208 liters) per year facility-wide.

[County Rule 336 §§ 301, 306, SIP Rule 336 §§ 301, 306]

- d) If the facility emits less than 15 pounds per day and less than two tons per year of VOCs from all surface coating operations subject to Rule 336 plus all VOC used for thinning and coating equipment cleanup.

[County Rule 336 § 306.5, SIP Rule 336 § 306.5]

- 5) The Permittee shall fully train all individuals before they are allowed to operate any surface coating equipment. Training shall include, at a minimum, proper application techniques, cleaning procedures, and equipment setup and adjustment as well as record keeping, VOC containment and VOC disposal requirements. Refresher training shall be given at least annually.

[County Rule 200 § 309] [locally enforceable only]

- 6) Coating Equipment Cleanup: The Permittee shall not use materials containing VOCs in the cleanup of the spray equipment used in surface coating operations unless:

- a) Either the used cleaning compounds are collected in a container which is closed when not in use and the solvent is disposed of in a manner which does not allow it to evaporate into the atmosphere or,
- b) the equipment is disassembled and cleaned in a solvent vat which is closed when not in use.
- c) In addition, all solvent-soaked wiping cloths are stored and disposed of in a closed containers.

[County Rule 336 § 303, SIP Rule 336 § 303]

- 7) Containers and mixing tanks shall be leak-free and shall be kept covered when they contain organic solvents or coatings, except when these materials are being mixed or transferred or when such containers are being cleaned.

[County Rule 336 § 304, SIP Rule 336 § 303]

- 8) VOC Containment and Disposal: The Permittee shall not store, discard, or dispose of VOC or VOC-containing material in a way intended to cause or to allow the evaporation of VOC to the atmosphere. Reasonable measures shall be taken to prevent such evaporation which include but are not limited to the following:

- a) All materials from which VOCs can evaporate, including coatings, fresh solvent, used solvent, waste solvent and solvent soaked rags and residues shall be stored in closed containers when not in use.
- b) Such containers one gallon and larger shall be legibly labeled with their contents.

[County Rule 336 §§ 305.1, 305.2, SIP Rule 336 §§ 305.1, 305.2]

B. RECORD KEEPING/ MONITORING:

- 1) The Permittee shall maintain a current list of coatings and adhesives, including their formulations as applied, makeup solvents, and any other VOC containing materials used for surface coating operations at the facility, stating the VOC content of each in either pounds per gallon or grams per liter.

[County Rule 336 § 502.1, SIP Rule 336 § 502.1]

- 2) Usage records of VOC-containing materials which comply with the limits of Table 1 of Rule 336 and records of the coatings exempted from Rule 336 § 301 and 302 as well as all solvents and other VOC containing materials used in surface coating operations shall be updated monthly.

[County Rule 336 § 502.2.b, SIP Rule 336 § 502.2.b]

- 3) Records of the disposal/recovery of VOC or VOC-containing materials shall be kept. This disposal/recovery records shall show the date, method of disposal/recovery, if the amount of VOCs being disposed of or reclaimed are being claimed to demonstrate compliance with the VOC limits of these Permit Conditions, the amount of VOCs being disposed/recovered and the method of

calculating it. Records of hazardous waste disposal shall be kept in accordance with hazardous waste disposal statutes.

[County Rules 210 336 § 305.3, SIP Rule 336 § 305.3]

- 4) The Permittee shall keep a log demonstrating that all training requirements of these Permit Conditions are being met. The log shall contain the date of training, the names of the individual responsible for providing the training as well as the individuals who are given the training, a brief description of the training method and the items covered by the training.

[County Rule 210 § 302.1.d] [locally enforceable only]

- 5) The Permittee shall conduct visual inspections to monitor compliance with requirements for paint booth filters. The inspections shall be conducted on a monthly basis during any month in which the booth is used for spray coating operations. The Permittee shall keep a log of the visual inspections showing the date of the inspection, the result of the inspection including any problems noted, and any corrective actions taken. If no spray coating operations were conducted during any given month, it shall be noted in the log to show why the visual inspection records were not required.

[County Rule 210 § 302.1.d] [locally enforceable only]

- C. TESTING METHODS: If required by the Control Officer, the applicable testing procedures contained in Rule 336 §503 shall be used to determine compliance with these surface coating permit conditions. Determination of filter efficiency shall be determined by ASHRAE Standard 52-76

[County Rules 315 § 501 and 336 § 503, SIP Rule 336 § 503]

- D. REPORTING: The Permittee shall file a semiannual compliance report starting from this permit issuance date within 30-days of the end of the 6-month period to the Division with attention to: Large Sources Compliance Supervisor containing the following information for the reporting period:

- 1) Summary of usage records of paints, solvents and other VOC containing materials used for surface coating operations;
- 2) Summary of monthly visual inspections records of the paint booth filters.

[County Rule 210 § 302.1.e(1)] [locally enforceable only]

22. PERMIT CONDITIONS FOR ARCHITECTURAL COATINGS:

- A. OPERATIONAL LIMITATIONS: The Permittee shall not apply any architectural coating manufactured after July 13, 1988, which is recommended for use as a bituminous pavement sealer unless it is an emulsion type coating.

[County Rule 335 § 301, SIP Rule 335 § 301]

The Permittee shall not apply any non-flat architectural coating manufactured after July 13, 1990, which contains more than 2.1 lbs (250 g/l) of volatile organic compounds per gallon of coating, excluding water and any colorant added to tint bases. These limits do not apply to specialty coatings listed in County Rule 335 § 305.

[County Rule 335 § 303 and SIP Rule 335 § 303]

The Permittee shall not apply any flat architectural coating manufactured after July 13, 1989, which contains more than 2.1 lbs (250 g/l) of volatile organic compounds per

gallon of coating, excluding water and any colorant added to tint bases. These limits do not apply to specialty coatings listed in County Rule 335 § 305.

[County Rule 335 § 304, SIP Rule 335 § 304]

The following coatings are exempt from the architectural coatings requirements specified in the permit conditions above:

- 1) Architectural coatings supplied in containers having capacities of one quart or less.
- 2) Architectural coatings recommended by the manufacturer for use solely as one or more of the following:
 - a) Below ground wood preservative coatings.
 - b) Bond breakers.
 - c) Fire retardant coatings.
 - d) Graphic arts coatings (sign paints)
 - e) Mastic texture coatings.
 - f) Metallic pigmented coatings.
 - g) Multi-colored paints.
 - h) Quick-dry primers, sealers and undercoaters.
 - i) Shellacs.
 - j) Swimming pool paints.
 - k) Tile-like glaze coatings.

[County Rule 335 §§ 306, 307 and SIP Rule 335 §§ 306, 307]

Containers for all architectural coatings subject to these Permit Conditions shall carry a statement of the manufacturer's recommendation regarding thinning of the coatings. Data may be quantified with either English or metric units. This requirement shall not apply to the thinning of the architectural coatings with water. The recommendation shall specify that the coating is to be employed without thinning or diluting under normal environmental and application conditions, unless the recommended thinning for normal environmental and application conditions does not cause the coating to exceed its applicable standard. Architectural coatings subject to the Federal Insecticide, Fungicide and Rodenticide Act shall not be subject to the labeling requirements of this permit.

[County Rule 335 § 401 and SIP Rule 335 § 401]

Containers for all coatings subject to the provisions of these Permit Conditions shall display the date of manufacture of the contents or a code indicating the date of manufacture.

[County Rule 335 § 402 and SIP Rule 335 § 402]

- B. **RECORDKEEPING/MONITORING:** The Permittee shall keep the material list of all coatings used. The material list should contain name of each coating, short description of the material, pounds of VOCs per gallon of coating, excluding water and colorant added to tint bases and amount used. If the coating is exempt from the volatile organic compounds content requirements, the justification for the determination shall be documented and kept on file.

[County Rule 210 § 302.1.e.] [locally enforceable only]

- C. **REPORTING:** The Permittee shall file a semiannual compliance report starting from this permit issuance date within 30-days of the end of the 6-month period to the Division

with attention to: Large Sources Compliance Supervisor containing material list and a list of the coatings which are exempt from the volatile organic compounds content requirements.

[County Rule 210 § 302.1.e.] [locally enforceable only]

- D. TESTING: If required by the Control Officer testing procedures to determine compliance with prescribed VOC limits shall be consistent with Reference Methods 24 and 24A in the Arizona Testing Manual for Air Pollutant Emissions.

[County Rule 335 § 500 and SIP Rule 335 § 500]

23. PERMIT CONDITIONS FOR GASOLINE STORAGE TANKS WITH CAPACITY GREATER THAN 250 GALLONS:

A. OPERATIONAL LIMITATIONS:

- 1) The Permittee shall limit gasoline throughput to less than 120,000 gallons per year.
- 2) The Permittee shall not allow gasoline to be transferred into any storage tank unless the storage tank is equipped with a submerged fill pipe, the end of which is totally submerged when the liquid in the tank is six inches from the bottom of the tank.

[County Rule 353 §§ 301, 303.2 and SIP Rule 353 §§ 301, 303.2]

- B. RECORD KEEPING/MONITORING: The Permittee shall maintain accurate records showing the quantity of all gasoline delivered to the facility. The total received each month and 12 month rolling total shall be recorded. The Permittee shall conduct and record an inspection each time the submerged fill pipe is reinstalled to monitor compliance with the fill pipe length requirements of these Permit Conditions. The Permittee shall keep records of each fill pipe removal showing the date of replacement and the date and result of the follow up inspection required by these Permit Conditions.

[County Rule 353 § 502 and SIP Rule 353 § 502]

- C. REPORTING: The Permittee shall file a semiannual compliance report starting from this permit issuance date within 30-days of the end of the 6-month period to the Division with attention to: Large Sources Compliance Supervisor containing the following information:

- 1) Summary of the monthly and 12-month rolling total records of the gasoline delivered;
- 2) Records of the inspections of the submerged fill pipe required by these Permit Conditions.

[Rule 210 § 302.1.e.(1)] [locally enforceable only]

24. PERMIT CONDITIONS FOR DUST GENERATING OPERATIONS:

- A. DUST CONTROL PLAN REQUIRED: The Permittee shall submit a Dust Control Plan and obtain the Control Officer's approval of the Dust Control Plan, before commencing any routine dust generating operation. The Dust Control Plan shall include all the information contained in County Rule 310, Section 304 and shall describe all control measures to be implemented before, after, and while conducting any dust generating operation, including during weekends, after work hours, and on

holidays. Any control measure that is implemented must meet the applicable standards described in these permit conditions, as determined by the corresponding test method(s), as applicable, and must meet other applicable standards set forth in County Rule 310.

[County Rule 310 §303 and 303.3(b) and SIP Rule 310 §303 and 303.3(b)]

Failure to comply with the provisions of an approved Dust Control Plan is deemed to be a violation of this Permit. Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of these permit conditions at all times. In addition, the Permittee with an approved Dust Control Plan is still subject to all of the requirements of these permit conditions, even if the Permittee is complying with the approved Dust Control Plan.

[County Rule 310 §306 and SIP Rule 310 §306]

If the Control Officer determines that an approved Dust Control Plan has been followed, yet fugitive dust emissions from any given fugitive dust source still exceed limits from this permit condition, then the Permittee shall make written revisions to the Dust Control Plan and shall submit such revised Dust Control Plan to the Control Officer within three working days of receipt of the Control Officer's written notice, unless such time period is extended by the Control Officer, upon request, for good cause. During the time that the Permittee is preparing revisions to the approved Dust Control Plan, the Permittee must still comply with all requirements of these permit conditions.

[County Rule 310 §305 and SIP Rule 310 §305]

- B. **ALLOWABLE EMISSIONS:** The Permittee shall not cause, suffer, allow, or engage in any dust generating or other operation which causes fugitive dust emissions exceeding 20% opacity, even during a wind event (i.e., during wind speeds of 25 mph or greater). Exceedances of the opacity limit that occur due to a wind event shall constitute a violation of the opacity limit. However, it shall be an affirmative defense in an enforcement action if the Permittee demonstrates all of the following conditions:
- 1) All control measures required were followed and one or more of the control measures listed below were applied and maintained;
 - a) Cease dust generating operations for the duration of the condition/situation/event when the 60-minute average wind speed is greater than 25 miles per hour. If dust generating operations are ceased for the remainder of the work day, stabilization measures must be implemented; or
 - b) Apply water or other suitable dust suppressant once per hour; or
 - c) Apply water as necessary to maintain a soil moisture content at a minimum of 12% as determined by ASTM Method D2216-98 or other equivalent as approved by the Control Officer and the Administer of EPA. For areas which have an optimum moisture content for compaction of less than 12% as determined by ASTM Method D1557-91(1998) or other equivalent as approved by the Control Officer and the Administer of EPA, maintain at least 70% of the optimum soil moisture content.
 - 2) The 20% opacity exceedance could not have been prevented by better application, implementation, operation, or maintenance of control measures;
 - 3) The Permittee compiled and retained records, in accordance with Recordkeeping requirements of this permit; and

- 4) The occurrence of a wind event on the day(s) in question is documented by records. The occurrence of a wind event must be determined by the nearest Maricopa County Environmental Services Department Air Quality Division monitoring station, from any other certified meteorological station, or by a wind instrument that is calibrated according to manufacturer's standards and that is located at the site being checked.

[County Rule 310 §301, Table 1, and Table 2
and SIP Rule 310 §301, Table 1, and Table 2]

C. OPERATIONAL LIMITATIONS:

- 1) Unpaved Access Road: The Permittee shall not allow fugitive dust emissions to exceed 20% opacity from unpaved access roads and:
 - a) Shall not allow silt loading equal to or greater than 0.33 oz/ft²; or
 - b) Shall not allow the silt content to exceed 6%; or
 - c) As an alternative to meeting the stabilization requirements for an unpaved access road, limit vehicle trips to no more than 20 per day and limit vehicle speeds to no more than 15 miles per hour. If complying with these permit conditions must include, in a Dust Control Plan, the number of vehicles traveled on the unpaved haul/access roads (i.e., number of employee vehicles, earthmoving equipment, haul trucks, and water trucks).

[County Rule 310 §302.2 and SIP Rule 310 §302.2]
- 2) Open Area Or Disturbed Surface Area: The Permittee on any disturbed surface area on which no activity is occurring shall meet at least one of the standards described below, as applicable. The Permittee shall be considered in violation of this permit if such inactive disturbed surface area is not maintained in a manner that meets at least one of the standards described below, as applicable.
 - a) Maintain a visible crust; or
 - b) Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher; or
 - c) Maintain a flat vegetative cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%; or
 - d) Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%; or
 - e) Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements; or
 - f) Maintain a percent cover that is equal to or greater than 10% for non-erodible elements; or
 - g) Comply with a standard of an alternative test method, upon obtaining the written approval from the Control Officer and the Administrator of the Environmental Protection Agency (EPA).

[County Rule 310 §302.3 and SIP Rule 310 §302.3]
- 3) Weed Abatement By Discing Or Blading: When engaged in weed abatement, the Permittee shall comply with the following work practices. Such work practices shall be implemented to meet the standards described in this permit condition.

- a) Apply water before weed abatement by discing or blading occurs; and
 - b) Apply water while weed abatement by discing or blading is occurring; and
 - c) Pave, apply gravel, apply water, or apply a suitable dust suppressant, in compliance with these permit conditions, after weed abatement by discing or blading occurs; or
 - d) Establish vegetative ground cover in sufficient quantity, in compliance with these permit conditions, after weed abatement by discing or blading occurs.
[County Rule 310 §308.8 and SIP Rule 310 §308.8]
- 4) The Permittee shall not allow or engage in the following on a routine basis:
- a) Unpaved parking lots;
 - b) Vehicle use in open areas;
 - c) Bulk material transport, hauling, handling and open storage piles;
 - d) Placement of bulk material onto paved surfaces; and
 - e) Earthmoving operations on disturbed surface areas one acre or greater. (Earthmoving activities associated with construction may be conducted after a separate earthmoving permit is obtained from the Control Officer)
[County Rule 210 §302.1.b(1)]

D. RECORDKEEPING/MONITORING:

If the Permittee is required to submit and obtain approval of a Dust Control Plan, the Permittee shall keep a daily written log recording the actual application or implementation of the control measures delineated in the approved Dust Control Plan. The log or the records and supporting documentation shall be made available to the Control Officer within 48 hours, excluding weekends, from written or verbal request.

[County Rule 310 §502 and SIP Rule 310 §502]

Copies of approved Dust Control Plans, control measures implementation records, and all supporting documentation shall be retained at least five years from the date such records are established.

[County Rule 310 §503 and SIP Rule 310 §503]

E. TESTING:

The following test methods shall be used as appropriate.

- 1) Opacity Observations:
 - a) Dust Generating Operations: Opacity observations of a source engaging in dust generating operations shall be conducted in accordance with County Rules Appendix C, Section 3 (Visual Determination Of Opacity Of Emissions From Sources For Time-Averaged Regulations) of County Rule 310, except opacity observations for intermittent sources shall require 12 rather than 24 consecutive readings at 15-second intervals for the averaging time.
[County Rule 310 §501.1(a), County Rules Appendix C Section 3 and SIP Rule 310 §501.1(a), Appendix C Section 3]
 - b) Unpaved Access Road: Opacity observations of any unpaved access road shall be conducted in accordance with County Rules Appendix C, Section

2.1 (Test Methods For Stabilization-For Unpaved Roads And Unpaved Parking Lots) of County Rule 310.

[County Rule 310 §501.1(c), County Rules Appendix C Section 2 and SIP Rule 310 §501.1(c), Appendix C Section 2]

2) Stabilization Observations:

- a) Unpaved Access Road: Stabilization observations for unpaved access roads shall be conducted in accordance with County Rules Appendix C, Section 2.1 (Test Methods For Stabilization-For Unpaved Roads And Unpaved Parking Lots) of County Rule 310. When more than one test method is permitted for a determination, an exceedance of the limits established in this permit determined by any of the applicable test methods constitutes a violation of these Permit conditions.

[County Rule 310 §501.2(b), County Rules Appendix C Section 2 and SIP Rule 310 §501.2(b), Appendix C Section 2]

- b) Open Area Or Disturbed Surface Area: Stabilization observations for an open area and vacant lot or any disturbed surface area on which no activity is occurring (whether at a work site that is under construction, at a work site that is temporarily or permanently inactive) shall be conducted in accordance with at least one of the techniques described in County Rule 310 subsection 501.2(c), as applicable. The Permittee shall be considered in violation of this permit if such inactive disturbed surface area is not maintained in a manner that meets at least one of the standards described in County Rule 310 subsection 302.3, as applicable.

[County Rule 310 §501.2(c) and SIP Rule 310 §501.2(c)]

3) Silt and Soil Moisture Content Methods:

- a) ASTM Method C136-96a ("Standard Test Method For Sieve Analysis Of Fine And Coarse Aggregates").
- b) ASTM Method D2216-98 ("Standard Test Method For Laboratory Determination Of Water (Moisture) Content Of Soil And Rock By Mass").
- c) ASTM Method 1557-91(1998) ("Test Method For Laboratory Compaction Characteristics Of Soil Using Modified Effort (56,000 ft-lb/ft³ (2,700 kN-m/m³)).

[County Rule 310 §504 and SIP Rule 310 §504]

25. PERMIT CONDITIONS FOR ABRASIVE BLASTING WITH BAGHOUSE AS SUPPORT ACTIVITIES FOR THIS FACILITY:

- A. ALLOWABLE EMISSIONS: The Permittee shall not discharge into the atmosphere from any abrasive blasting any air contaminant for a period or periods aggregating more than three minutes in any one-hour period which is a shade or density darker than 20 percent opacity.

[County Rule 312 § 301] [locally enforceable only]

- B. OPERATIONAL LIMITATIONS: The Permittee shall not forcibly exhaust abrasive blasting equipment to the outside of the building unless the exhaust is vented through a baghouse. The baghouse shall operate within operating parameters specified in Operation and Maintenance (O&M) Plan most recently approved in writing by the Control Officer.

- C. **RECORD KEEPING:** The Permittee shall keep records of the following:
- 1) The dates when abrasive blasting activities are conducted and the type of abrasive material used.
 - 2) Monthly records of the type and amount of abrasive blasting media used.
 - 3) Monthly opacity readings of visible emissions for each month when abrasive blasting is conducted.
 - 4) Every inspection or preventive maintenance performed on the baghouse according to the Operation and Maintenance Plan. The Permittee shall maintain records of the key system operating parameters required by the O&M Plan. The Permittee shall keep a log demonstrating that any training requirements in the approved O&M Plan are being met.

[County Rule 210 § 302.1.d] [locally enforceable only]

- D. **MONITORING/TESTING:** The Permittee shall monitor compliance with the abrasive blasting opacity requirements of these Permit Conditions by monthly observations of visible emissions conducted in accordance with EPA Reference Method 9 each month the abrasive blasting performed for more than 10 hours.

Visible emission evaluation of abrasive blasting operations shall be conducted in accordance with the following provisions:

- 1) Emissions from unconfined blasting shall be read at the densest point of the emission after a major portion of the spent abrasives has fallen out, at a point not less than five feet nor more than 25 feet from the impact surface from any single abrasive blasting nozzle.
- 2) Emissions from unconfined blasting employing multiple nozzles shall be judged as single source unless it can be demonstrated by the Permittee that each nozzle, evaluated separately, meets the emission standards of these Permit Conditions.
- 3) Emissions from confined blasting shall be read at the densest point after the air contaminant leaves the enclosure.

[County Rules 210 § 302.1.c and 312 § 500] [locally enforceable only]

- E. **REPORTING:** The Permittee shall file a semiannual compliance report starting from this permit issuance date within 30-days of the end of the 6-month period to the Division with attention to: Large Sources Compliance Supervisor. The report shall contain a summary of abrasive blasting media usage for the reporting period, total hours of operation of the baghouse, summary of the opacity readings and a list of dates that baghouse operated outside the operating parameters specified in O&M Plan.

[County Rule 210 § 302.1.e.(1)] [locally enforceable only]

26. PERMIT CONDITIONS FOR ABRASIVE BLASTING WITHOUT BAGHOUSE:

- A. **ALLOWABLE EMISSIONS:**

The Permittee shall not discharge into the atmosphere from any abrasive blasting any air contaminant for a period or periods aggregating more than three minutes in any one-hour period which is a shade or density darker than 20 percent opacity.

[County Rule 312 § 301] [locally enforceable only]

- B. **OPERATIONAL LIMITATIONS:**

The Permittee shall utilize at least one of the following control measures for all abrasive blasting:

- 1) Confined blasting,
- 2) Wet abrasive blasting,
- 3) Hydroblasting.
- 4) A control measure that is determined by the Control Officer through the permit revision to be equally effective to control particulate emissions.

[County Rule 312 §§302.1,2,3] [locally enforceable only]

C. RECORD KEEPING: The Permittee shall keep records of the following:

- 1) The dates when abrasive blasting activities are conducted, the type of abrasive material used, the type of control measure used.
- 2) Monthly records of the type and amount of abrasive blasting media used.
- 3) Opacity reading during the external blasting.

[County Rule 210 § 302.1.d] [locally enforceable only]

D. MONITORING/TESTING: The Permittee shall monitor compliance with the opacity requirements of the permit conditions for abrasive blasting by observations of visible emissions conducted in accordance with EPA Reference Method 9 each time the external blasting is performed.

[County Rule 210 § 302.1.c] [locally enforceable only]

E. REPORTING: The Permittee shall file a semiannual compliance report starting from this permit issuance date within 30-days of the end of the 6-month period to the Division with attention to: Large Sources Compliance Supervisor. The report shall contain a summary of the opacity readings during external blasting, control measures utilized for abrasive blasting and dates on which external blasting was performed.

[County Rule 210 § 302.1.e.(1)] [locally enforceable only]

27. APPLICABLE REQUIREMENTS FOR INTERNAL COMBUSTION ENGINES USED FOR EMERGENCY PURPOSES:

A. ALLOWABLE EMISSIONS: The Permittee shall not allow the potential emissions at 500 hours of operation each of all internal combustion engines to exceed 4,000 pounds of NO_x or CO per year as evidenced by an installed non-resetable hour meter or written usage records maintained by the operator.

B. OPERATIONAL LIMITATIONS: The Permittee shall not operate any single emergency engine more than 500 hours per year for routine testing and emergency standby operation. The Permittee shall use these emergency engines only for power when normal power line service fails or the emergency pumping of water.

C. RECORDKEEPING: The Permittee shall keep accurate records of all hours of operation and reason for operation for each emergency engine to monitor for compliance with operational limitations and allowable emissions.

[County Rule 200, §§ 303.3,c,(5),(6)] [locally enforceable only]

28. PERMIT CONDITIONS FOR THE COLD DEGREASERS AS SUPPORT ACTIVITIES FOR THIS FACILITY:

A. OPERATIONAL LIMITATIONS:

- 1) The Permittee shall equip any solvent degreaser/cleaner with the following:
 - a) Vessel: A leakfree container (degreaser) for the solvents and the articles being cleaned.
 - b) Cover: An apparatus or non-porous cover which prevents the solvent from evaporating when not processing work in the degreaser.
 - c) Solvent Return: A facility for draining cleaned parts such that the drained solvent is returned to the container.
 - d) Instructions: A permanent, conspicuous label which summarizes operating requirements contained in permit conditions "5" of this section.
[County Rule 331 § 301, SIP Rule 331 § 301]
- 2) A cold degreaser/cleaner with remote reservoir shall be equipped with the following:
 - a) A sink-like work area which is sloped sufficiently towards the drain to prevent pooling of solvent.
 - b) A single drain opening or cluster of openings served by a single drain for the solvent to flow from the sink into the enclosed reservoir. Such opening(s) shall be contained within a contiguous area not larger than 15.5 square inches (100 cm²).
 - c) If a low volatility solvent is not used or if the solvent is heated above 120°F (49°C), a stopper shall seal the drain opening or a cover shall be placed over the top of the sink when the reservoir is not in use. For the purposes of degreasers, a low volatile solvent is a solvent with initial boiling point greater than 248 Degrees F determined according to County Rule 331 § 502.8 and used at least 180 Degrees F below the initial boiling point.
[County Rule 331 § 302.1, SIP Rule 331 § 302.1]
- 3) A cold degreaser/cleaner without a remote reservoir shall be equipped with the following as applicable:
 - a) Freeboard height, which is the distance from the top of the solvent to the top of the tank, of not less than 6 inches (15.2 cm) and a cover for a cold degreaser/cleaner using only non-agitated, low volatility solvent(s)
 - b) A cold degreaser using solvents which are not low volatility solvents or which are agitated or are heated above 120°F (49°C) as determine by County Rule 331 § 502.7 shall have internal drainage and:
 - (1) have a freeboard ratio of 0.75 or greater, or
 - (2) a water cover may be used to meet 0.75 freeboard ratio requirement of if the solvent is insoluble in and denser than water; and
 - (3) a cover shall be used that is of a sliding or rolling type which is designed to easily open and close without disturbing the vapor zone.
 - c) A permanent, conspicuous mark shall locate the maximum allowable solvent level which conforms to the applicable freeboard requirements.
[County Rule 331 § 302.2, SIP Rule 331 § 302.2]
- 4) The Permittee must conform to the following operating requirements for the cold solvent cleaning (degreasing) equipment:
 - a) Operate and maintain the degreasing equipment and emission control equipment in proper working order.

- [County Rule 331 § 306.1, SIP Rule 331 § 306.1]
- b) Do not allow any solvent to leak from any portion of the degreasing equipment.
- [County Rule 331 § 306.2, SIP Rule 331 § 306.2]
- c) All solvent storage, including the storage of waste solvent and waste solvent residues, shall at all times be in closed containers which are legibly labeled with their contents.
- [County Rule 331 § 306.3, SIP Rule 331 § 306.3]
- d) Do not dispose of any solvent, including waste solvent, in such a manner as will cause or allow its evaporation into the atmosphere. Records of its disposal/recovery shall be kept in accordance with hazardous waste disposal statutes.
- [County Rule 331 § 306.4, SIP Rule 331 § 306.4]
- e) Do not remove any device designed to cover the solvent unless processing work in the degreaser or performing maintenance on the degreaser.
- [County Rule 331 § 306.5, SIP Rule 331 § 306.5]
- f) Drain cleaned parts for at least 15 seconds after cleaning or until dripping ceases (non-vapor degreasing only)
- [County Rule 331 § 306.6, SIP Rule 331 § 306.6]
- g) If using a solvent spray system, use only a continuous, undivided stream (not a fine, atomized, or shower type spray) at a pressure which does not exceed 10 psig or cause liquid solvent to splash outside of the solvent container. In a conveyORIZED degreaser/cleaner a shower-type spray may be allowed, provided that the spraying is conducted in a totally confined space that is separated from the environment.
- [County Rule 331 § 306.7, SIP Rule 331 § 306.7]
- h) Perform solvent agitation, where necessary, through pump recirculation or by means of a mixer. Do not use air agitation of the solvent bath. Covers shall be placed over ultrasonic cleaners when the cleaning cycle exceeds 15 seconds.
- [County Rule 331 § 306.8, SIP Rule 331 § 306.8]
- i) Do not place porous or absorbent materials such as cloth, leather, wood or rope in or on a degreaser.
- [County Rule 331 § 306.9, SIP Rule 331 § 306.9]
- j) For open-top degreasers:
- (1) Comfort fans shall not be used near degreasers.
- (2) Water should not be visually detectable in the organic solvent exiting the water separator.
- [County Rule 331 § 306.11, SIP Rule 331 § 306.11]
- 5) The provisions of these Permit Conditions shall not apply:
- a) to wipe cleaning,
- b) to any cold solvent degreaser/dip-tank with a liquid surface area of 1 square foot (0.09 square meters) or less, or with a maximum capacity of one gallon (3.79 liters) or less except that these shall be covered when work is not being processed, and
- c) to the cleanup of coating equipment after use.
- [County Rule 331 § 307, SIP Rule 331 § 307]

- B. **RECORD KEEPING/MONITORING:** The Permittee shall:
- 1) Maintain a current list of solvents; state the VOC content of each in pounds per gallons or grams per liter. The VOC content of solvents and any liquids used as cleaning or degreasing agents shall be stated with water and non-precursors included.
 - 2) Maintain monthly records showing the type and amount of each make up solvent added and any other VOC-containing materials used.
[County Rule 331 § 501, SIP Rule 331 § 501]
 - 3) Perform weekly visual inspections of all cold degreasing equipment to verify compliance with these Permit Conditions.
- C. **TESTING METHODS:** If testing is required by the Control Officer the applicable testing procedures contained in Rule 331 § 502 shall be used.
[County Rule 331 § 502, SIP Rule 331 § 502]
- D. **REPORTING:** The Permittee shall file a semiannual compliance report starting from this permit issuance date within 30-days of the end of the 6-month period to the Division with attention to: Large Sources Compliance Supervisor containing the current list and summary of usage records of the solvents.
[County Rule 210 § 302.1.e.(1)] [locally enforceable only]

29. PERMIT CONDITIONS FOR WIPE CLEANING:

- A. **OPERATIONAL LIMITATIONS:** The Permittee shall conform to the following operating requirements:
- 1) All solvent storage, including the storage of waste solvent and waste solvent residues, shall at all times be in closed containers which are legibly labeled with their contents;
[County Rule 331 §306.3], [SIP Rule 331 §306.3]
 - 2) Do not dispose of any solvent, including waste solvent, in such a manner as will cause or allow its evaporation into the atmosphere.
[County Rule 331 §306.4], [SIP Rule 331 §306.4]
- B. **RECORDKEEPING/MONITORING:** The Permittee shall:
- 1) Maintain a current list of solvents; state the VOC content of each in pounds per gallons or grams per liter. The VOC content of solvents and any liquids used as cleaning or degreasing agents shall be stated with water and non-precursors included.
 - 2) Maintain monthly records showing the type and amount of each make up solvent added and any other VOC-containing materials used.
[County Rule 331 §501], [SIP Rule 331 §501]
 - 3) Records of solvents disposal/recovery shall be kept in accordance with hazardous waste disposal statutes.
[County Rule 331 §306.4], [SIP Rule 331 §306.4]
- C. **REPORTING:** The Permittee shall file a semiannual compliance report starting from this permit issuance date within 30-days of the end of the 6-month period to the Division with attention to Large Sources Compliance Supervisor containing the current list and

summary of usage records of the solvents.

[County Rule 210 §302.1.e.(1)] [locally enforceable only]

30. PERMIT CONDITIONS FOR CUTBACK AND EMULSIFIED ASPHALT:

A. OPERATIONAL LIMITATIONS:

The Permittee shall not use or apply the following materials for paving, construction, or maintenance of highways, streets, driveways, parking lots or for any other use to which County Rule 340 § 300 and SIP Rule 340 § 300 applies:

- 1) Rapid cure cutback asphalt.
- 2) Any cutback asphalt material, road oils, or tar which contains more than 0.5 percent by volume VOCs which evaporate at 500°F (260°C) or less using ASTM Test Method D 402-76.
- 3) Any emulsified asphalt or emulsified tar containing more than 3.0 percent by volume VOCs which evaporate at 500°F (260°C) or less as determined by ASTM Method D 244-89.

[County Rule 340 § 301 and SIP Rule 340 § 301]

The Permittee shall not store for use any emulsified or cutback asphalt product which contains more than 0.5 percent by volume solvent-VOC unless such material lot includes a designation of solvent-VOC content on data sheet(s) expressed in percent solvent-VOC by volume.

[County Rule 340 § 303 and SIP Rule 340 § 303]

- #### B. EXEMPTIONS:
- The provisions of these Permit Conditions shall not apply to asphalt that is used solely as a penetrating prime coat and which is not a rapid cure cutback asphalt. Penetrating prime coats do not include dust palliatives or tack coats.

[County 340 § 302.1 and SIP Rule 340 § 302.1]

The Permittee may use up to 3.0 percent solvent-VOC by volume for batches of asphalt rubber which cannot meet paving specifications by adding heat alone only if request is made to the Control Officer, who shall evaluate such requests on a case-by-case basis. The Permittee shall keep complete records and full information is supplied including savings realized by using discarded tires. The Permittee shall not exceed 1100 lbs (500 kg) usage of solvent-VOC in asphalt rubber in a calendar year unless the Permittee can demonstrate that in the previous 12 months no solvent-VOC has been added to at least 95 percent by weight of all the asphalt rubber binder made by the Permittee or caused to be made for the Permittee. This Permit Condition does not apply to batches which yield 0.5 percent or less solvent-VOC evaporated using the test in County Rule 340 § 502.1.

[County 340 § 302.3 and SIP Rule 340 § 302.3]

- #### C. RECORD KEEPING:
- The Permittee shall keep daily records of the amount and type of asphaltic/bituminous material received and used, as well as the solvent-VOC content of this material. Safety data (MSDS) or technical data sheets shall be kept available.

[County 340 § 501 and SIP Rule 340 § 501]

- #### D. TESTING METHODS:

If required by the Control Officer the applicable testing procedures contained in County Rule 340 § 502 and SIP Rule 340 § 502 shall be used to determine compliance with these Permit Conditions.

[County 340 § 502 and SIP Rule 340 § 502]

- E. **REPORTING:** The Permittee shall file a semiannual compliance report starting from this permit issuance date within 30-days of the end of the 6-month period to the Division with attention to: Large Sources Compliance Supervisor containing the dates and description of any usage of cutback and emulsified asphalt.

[County Rule 210 § 302.1.e.(1)] [locally enforceable only]

31. PERMIT CONDITIONS FOR VOLATILE ORGANIC COMPOUNDS:

The provisions of these Permit Conditions based on Rule 330 shall not apply to the use of equipment, materials, and/or substances which meet applicable requirements and standards specified by other Permit Conditions of this Permit.

[County Rule 330 § 307.2] [locally enforceable only]

A. OPERATIONAL LIMITATIONS:

- 1) Excluding emissions subject to County Rule 330 § 301, the Permittee shall not discharge more than 40 pounds (18 kg) of volatile organic compounds into the atmosphere in any one day from any machine, equipment, device or other article for employing, applying, evaporating or drying any non-complying solvent (as defined in County Rule § 202) or material containing such non-complying solvent, unless the entire amount of such discharge has been reduced in accordance with County Rule 330 § 304.

[County Rule 330 § 302] [locally enforceable only]

- 2) Emission to the atmosphere of volatile organic compounds shall be reduced by using low VOC material containing no more than 20 percent VOC by volume (as determined by the applicable test method(s) and excluding non-precursor organic compounds and water), provided that no VOC from the material comes into contact with flame; or

[County Rule 330 § 304.3] [locally enforceable only]

- 3) The Permittee shall not use any liquid materials containing more than 10 percent volatile organic compounds for the cleanup of equipment unless:
- a) The used cleaning liquids are collected in a container which is closed when not in use and is disposed of in a manner such that volatile organic compounds are not emitted into the atmosphere, or
 - b) The equipment is disassembled and cleaned in a solvent vat which is closed when not in use.

[County Rule 330 § 305.1&2] [locally enforceable only]

- 4) The Permittee shall not store, discard, or dispose of VOC or VOC-containing material in a way intended to cause or to allow the evaporation of VOC to the atmosphere. Reasonable measures shall be taken to prevent such evaporation which include but are not limited to the following:

- a) All materials from which VOC can evaporate, including fresh solvent, waste solvent and solvent-soaked rags and residues, shall be stored in closed containers when not in use; and

- b) Such containers one gallon and larger shall be legibly labeled with their contents; and

[County Rule 330 § 306.1&2] [locally enforceable only]

- 5) Determination of the organic solvent content and composition of a solvent or material shall be made as of the time that the solvent or material is in its final form for application or employment, notwithstanding any prior blending, reducing, thinning or other preparation for application or employment. Emissions resulting from air or heat drying of products for the first 12 hours after the removal from any machine, equipment, device or other article shall be included in determining compliance with these Permit Conditions.

[County Rule 330 § 502] [locally enforceable only]

B. RECORDKEEPING: The Permittee shall maintain:

- 1) A current list of coatings, adhesives, makeup solvents, and any other VOC-containing materials; state the VOC content of each in pounds per gallon or grams per liter. VOC content shall be expressed less water and non-precursor compounds for materials which are not used for cleaning or cleanup.

[County Rule 330 § 503.1] [locally enforceable only]

- 2) Monthly records of the amount of each coating; adhesive; makeup solvent; solvent used for surface preparation, for cleanup, and for the removal of materials; and any other VOC-containing material used. Identify any materials subject to the emission limits in Section 301 or Section 302 and keep separate totals for these materials.

[County Rule 330 § 503.2] [locally enforceable only]

- 3) Records of the type, amount, and method of disposing of VOC-containing materials on each day of disposal.

[County Rule 330 § 503.4] [locally enforceable only]

- 4) Records of the disposal/recovery of such materials. Records of hazardous waste disposal shall be kept in accordance with hazardous waste disposal statutes.

[County Rule 330 § 306.3] [locally enforceable only]

E. REPORTING: The Permittee shall file a semiannual compliance report starting from this permit issuance date within 30-days of the end of the 6-month period to the Division with attention to: Large Sources Compliance Supervisor containing the monthly records of the amount of each coating, adhesive, solvents and any other VOC-containing materials used.

[County Rule 210 § 302.1.e.(1)] [locally enforceable only]

***APPENDIX A:
EQUIPMENT LIST***

Santan Generating Station

Permit Number V95-008

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**APPENDIX A
EQUIPMENT LIST:
Santan Generating Station
Permit Number V95-008**

Electricity generating units:

Units S-1, S-2, S-3, and S-4:

Combined cycle, combustion turbine/heat recovery steam generator units, manufactured by General Electric (GE), with maximum output of approximately 90 MW. The combustion turbine section consists of a high efficiency axial compressor, a combustion chamber with GE Dry Low NO_x Fuel Gas Control System (DLNxl) combustors arranged in a circular array around the machine axis and a reaction type turbine. Units S-1, S-2 and S-3 began operation in 1973 and Unit S-4 began operation in 1974.

Unit S-5A, S-5B and S-6A (New Units):

GE Frame 7F-A combustion turbine/heat recovery steam generator units, each with maximum power output of approximately 175 MW. Units S-5A and S-5B are each equipped with a 560 MMBtu/hr (LHV) supplemental duct burner and S-6A is equipped with a 490 MMBtu/hr (LHV) supplemental duct burner. Recovered heat from Units S-5A and S-5B (two-on-one configuration) combined powers one steam turbine, and recovered heat from S-6A (one-on-one configuration) powers a second steam turbine. Emissions from the turbine/duct burner sets are controlled via Selective Catalytic Reduction (SCR) for NO_x reduction and oxidation catalysts for VOC and CO reduction.

Cooling towers:

CT1 (Existing Unit):

One 101,500 gpm, mechanically-induced-draft, cross-flow cooling tower manufactured by Marley Model 664-3-06, in operation since 1973.

CT6 (New Unit for Unit S-6A):

One 80,000 gpm, mechanically-induced-draft, cross-flow cooling tower (manufacturer to be determined), equipped with mist eliminators designed to achieve less than 0.0005 percent drift.

CT5 (New Unit for Units S-5A & S-5B):

One 175,000 gpm, mechanically-induced-draft, cross-flow cooling tower (manufacturer to be determined) equipped with mist eliminators designed to achieve less than 0.0005 percent drift.

Emergency Diesel Pump Engines (New Equipment):

One 310-HP diesel-fired emergency fire water pump and one 410-HP diesel-fired emergency generator meeting USEPA Tier 1 emission standards. Manufacturers to be determined.

Gasoline Storage Tank:

One 500-gallon unleaded gasoline storage tank.

One 1000-gallon unleaded gasoline above ground storage tank.

Abrasive Blasting Equipment:

One abrasive blasting building, 12'x18'x12'; totally enclosed; exhausted to the baghouse. Fabric filter baghouse with 20 HP fan, model SQ-100-8. In operation since 1978.

Surface Coating Equipment:

One Binks Paint Booth Model CA-528-T-LH; 14'x28'x12' with filtered exhaust. In operation since 1992.

Continuous Emissions Monitors:

Continuous emissions monitoring equipment for NO_x, CO, and either O₂ or CO₂ sufficient to measure the emissions of each of Units S-1 through S-4 and S-5A, S-5B, and S-6A.

Oxidation Catalyst Systems

Oxidation Catalyst Systems for CO emission reduction on each of Units S-1, S-2, S-3, and S-4 capable of meeting the emission limits of this Permit; Oxidation Catalyst Systems for CO and VOC emission reduction on each of Units S-5A, S-5B, and S-6A capable of meeting the emission limits of this Permit.

EQUIPMENT EXEMPT FROM OBTAINING A PERMIT BUT WITH APPLICABLE REQUIREMENTS:

Fuel Oil Storage Tanks:

One 500 gallons vehicle diesel fuel storage tank.
One 5,500,000 gallon distillate fuel oil storage tank.
One 120 gallons diesel fuel oil storage tank.

Diesel Fire Pump:

One Onan Diesel Fire Pump, Cummins Engine, model V8-1681F.

Solvent Cleaning Equipment:

Unheated, non-conveyorized, cleaning equipment complying with requirements of County Rule 200 § 303.3 c. (4).

APPENDIX B:
PERMIT SHIELD
Santan Generating Station
Permit Number V95-008

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Identified below are all federal, state and local air pollution control requirements applicable to Santan Generating Station at the time the permit is issued. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance included in the Appendix B "Permit Shield" of this permit.

County Enforceable Requirements
Maricopa County
Air Pollution Control Regulations

Regulation I General Provisions

Rule 100		General Provisions and Definitions (5/20/98 revision)
	§104	Circumvention
	§105	Right of Inspection of Premises
	§106	Right of Inspection of Records
	§ 301	Air Pollution Prohibited
	§ 501	Emergency Provision
	§ 502	Excess Emissions
	§ 503	Records Required
	§ 504	Data Reporting
	§ 505	Emission Statements Required
	§ 506	Retention of Records
	§ 507	Annual Emissions Inventory Questionnaire

Regulation II Permits and Fee

Rule 200		Permit Requirements (5/20/98 revision)
	§ 301	Permits Required
	§ 306	Permit to Burn
	§ 308	Standards for Applications
	§ 309	Permit Contents
	§ 310	Prohibition – Permit Modification
	§ 311	Permit Posting Required
	§ 402.1 a & b	Permit Reopenings; Revocation and Reissuance; Termination

Rule 200		Permit Requirements (5/20/98 revision)
	§ 403.2	Permit Renewal
	§ 404.1	Permit Transfers
	§ 407	Air Quality Impact Models
	§ 408	Testing Procedures
	§ 409	Permit Fees
	§ 411	Public Records; Confidentiality

Rule 270		Performance Tests (11/15/93 revision)
	§ 301	Performance Tests Required (approved test methods)
	§301.1	Applicable Procedures and Testing Methods
	§ 301.2	Opacity determined by Reference Method 9 of the AZ Testing Manual
	§ 401	Performance Tests Required
	§ 402	Testing Criteria
	§ 403	Testing Conditions
	§ 404	Notice of Testing
	§ 405	Testing Facilities Provided
	§ 406	Minimum Testing Required
	§ 407	Compliance with the Emission Limits
	§ 408	Additional Testing

Rule 280		Fees (11/15/93 revision)
	§ 301	Title V Permit Fees
	§ 304	Calculation of Emission Fees
	§ 305	Portable Source Relocation Inspection Fee
	§ 308	Gasoline Delivery Vessel Fee
	§ 309	Permit to Burn Fee
	§ 310	Earth Moving Permit Fee
	§ 311	Asbestos Removal Notification and Plan Review Filing Fee
	§ 313	Hourly Rate
	§ 401	Payment of Fees

Regulation III Control of Air Contaminants

Rule 300		Visible Emissions (8/5/94 revision)
	§ 301	Limitations – Opacity/General: Opacity \leq 20%
	§ 302	Exceptions
	§ 501	Compliance Determination – Opacity
	§ 502	Compliance Determination – Opacity of Visible Emissions from Intermittent Sources

Rule 310		Open Fugitive Dust Sources (9/20/94 revision)
	§ 301	Limitation – Opacity
	§ 302	Dust Generating Operations – Permit Required
	§ 303	Control Plan Required with Permit Application
	§ 304	Control Plan Revision
	§ 305	Vehicle Use in Open Areas and Vacant Parcels
	§ 306	Unpaved parking Areas/Staging Areas
	§ 307	Unpaved Haul/Access Roads
	§ 308	Disturbed Surface Areas
	§ 309	Vacant Areas
	§ 310	Material Handling
	§ 311	Material Transport
	§ 312	Roadways, Streets and Alleys
	§ 313	Erosion, Sedimentation and Deposited of Bulk Materials onto Paved Surfaces
	§ 401	Information Required to be Included in a Control Plan
	§ 402	Permit and Control Plan Posting Required
	§ 501	Opacity Determination
	§ 502	Wind Speed Determination
	§ 503	Recordkeeping
	§ 504	Records Retention

Rule 312		Abrasive Blasting (7/13/88 revision)
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Rule 312	Abrasive Blasting (7/13/88 revision)
§ 301	Prohibition – Open Outdoor Fires
§ 302	Controls Required
§ 501	Visible Emissions Evaluation Techniques

Rule 314	Open Outdoor Fires (7/13/88 revision)
§ 301	Prohibition – Open
§ 302	Exemptions
§ 401	Fees Required
§ 402	Fire Department Validation Required

Rule 315	Spray Coating Operations (8/19/98 revision)
§ 301	Control Required
§ 302	Exemptions

Rule 320	Odors and Gaseous Air Contaminants (7/13/88 revision)
§ 300	Standards
§ 302	Material Containment Required
§ 304	Limitation – Hydrogen Sulfide
§ 306.4	Permit Conditions – High Sulfur Oil

Rule 330	Volatile Organic Compounds (6/19/96 revision)
§ 302	Limitations
§ 304.3	Reductions Required
§ 305	Equipment Cleanup
§ 306	VOC Containment and Disposal
§ 307.2	Exemptions
§ 502	Determination of Compliance
§§ 503.1, 2, 4	Recordkeeping and Reporting

Rule 331	Solvent Cleaning (6/19/96 revision)
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Rule 331		Solvent Cleaning (6/19/96 revision)
	§ 301	General Equipment Requirements
	§ 302	Cold Degreasing/Cleaning
	§ 306	General Operating Requirements (except §§ 306.10, 306.11 and 306.12)
	§ 307	Exemptions
	§ 501	Solvent Records Required

Rule 335		Architectural Coatings (7/13/88 revision)
	§ 301	Prohibition – Bituminous Pavement Sealers
	§ 302	Interim Limits – Non-Flat Architectural Coatings
	§ 303	Final Limits – Non-Flat Architectural Coatings
	§ 304	Limits – Flat Architectural Coatings
	§ 305	Limits – Specialty Coating
	§ 306	Exemptions – Specific Use Coatings
	§ 307	Exemption – Small Containers

Rule 336		Surface Coating Operations (6/19/96 revision)
	§ 301	Limitations – VOC Emissions
	§ 303	Coating Equipment Cleanup
	§ 304	Covers Required
	§ 305	VOC Containment and Disposal
	§ 306.1	General Exemptions
	§ 306.5	Small Sources
	§ 502	Recordkeeping and Reporting
	§ 502.1	Current List
	§ 502.2	Materials Accounting
	§ 502.3	Cleanup Materials
	§ 502.4	Small Sources

Rule 340		Cutback and Emulsified Asphalt (9/21/92 revision)
	§ 301	Limitations
	§ 302	Exemptions

Rule 340	Cutback and Emulsified Asphalt (9/21/92 revision)
§ 303	Labeling Requirements
§ 501	Recordkeeping and Reporting

Rule 353	Transfer of Gasoline into Stationary Storage Dispensing Tanks (4/6/92 revision)
§ 303.2	Exemptions – Non-resale dispensing operation
§ 502	Recordkeeping

Rule 360	New Source Performance Standards
§ 301.1	Subpart A
§ 301.3	Subpart Da
§ 301.40	Subpart GG

Rule 370	Federal Hazardous Air Pollutant Program (5/14/97 revision)
§ 301	Standards of Performance for Federally Listed Hazardous Air Pollutants
§ 301.1	Subpart A – General provisions
§ 301.8	Subpart M – National Emission Standard for Asbestos

Rule 371	Acid Rain (4/3/96 revision)
§ 301	Incorporated Subparts of the Federal Acid Rain Regulations

State Enforceable Requirements

Arizona Administrative Code

(Applicable in Maricopa County; ARS § 49-106)

R18-2-703.C.1	<p>For existing fossil-fuel fired steam generators having a heat input rate of 4200 million BTU per hour or less, the maximum allowable particulate emissions rate in pounds-mass per hour:</p> $E = 1.02Q^{0.769}$ <p>where: Q = heat input in million BTU per hour.</p>
R18-2-719.C.1	<p>For existing stationary rotating machinery having a heat input rate of 4200 million BTU per hour or less, the maximum allowable particulate emissions rate in pounds-mass per hour</p> $E = 1.02Q^{0.769}$ <p>where: Q = heat input in million BTU per hour.</p>

Federally Enforceable Requirements

40 CFR Part 68 - Accidental Release Program

40 CFR Part 61 Subparts 145-147, 150 - NESHAP Program

40 CFR Part 82 Subparts 106-124, 156, 158, 161 - Protection of Stratospheric Ozone

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Federally Enforceable Requirements
Maricopa County State Implementation Plan (as of 7/30/98)

Regulation I General Provisions

Rule 3 Air Pollution Prohibited

Regulation II Permits
Rule 220 - Permit Requirements
§§ 301, 302.b, 401, 403, 410
Rule 21 - Permit Condition
§ A
Rule 22 - Permit Denial – Action – Transfer – Posting – Revocation – Compliance
§§ F, G1, H
Rule 23 - Permit Classes
Rule 25 - Emissions Test Methods and Procedures
§§ A, D
Rule 26 - Portable Equipment
Rule 26 - Air Quality Models
Rule 27 - Performance Tests
Rule 28 - Permit Fees

Regulation III Control of Air Contaminants

Rule 30 - Visible Emissions
Rule 31 - Emissions of Particulate Matter

§§ A.1,2,3,4,6,7 - Non-Point Sources of Particulate Matter.
§ H.1.a - Fuel Burning
Rule 310 - Open Fugitive Dust Sources
Rule 314 – Open Outdoor Fires
Rule 32 - Odors and Gaseous Emissions
§§ A, E, F, H 2,3,4
Rule 33 - Storage and Handling of Petroleum Products unless Drybreak Couplings are used
Rule 331 - Solvent Cleaning
§§ 301, 302, 306, 307, 501
Rule 34 - Organic Solvents – Volatile Organic Compounds
§§ G, K, L
§ C. 1 - Metal cleaning operations
§ 2.a. - Requirements for Cold Organic Solvent Cleaning
§§ E. 1, 2 - Spray Paint and Other Surface Coating Operations
Rule 335 - Architectural Coatings
Rule 336 - Surface Coating Operations
§§ 301, 303 306.1, 5, 502.1-4
Rule 340 - Cutback and Emulsified Asphalt
§§ 301 - 303, 501
Rule 353 - Transfer of Gasoline into Stationary Dispensing Tanks
§§ 303.2, 502

Rule IV Production of Records: Monitoring, Testing and Sampling Facilities
Rule 40 Recordkeeping and Reporting
Rule 41 Monitoring
§ A
Rule 42 Testing and Sampling
Rule 43 Right of Inspection
Regulation V Unlawful Open Burning
Rule 50 Open Outdoor Fire
Rule 51 Exceptions
Rule 52 Conditions
Rule 72 Emergency Episode Criteria
§§ e, f, g

**Final Proposed Revision Technical Support Document
Santan Generating Station
Permit Number V95-008
Minor Permit Revision 5-26-04-02
May 23, 2005**

**1. APPLICANT
FACILITY ADDRESS**

Salt River Project
1521 N. Project Drive
Tempe, AZ 85281-1298

2. PROJECT LOCATION

The Salt River Project (SRP) Santan Generating Station (Santan) is located on 120 acres at 1005 South Val Vista Road, Gilbert, AZ 85296. The site elevation is 1,273 feet above mean sea level (MSL).

3. PROJECT DESCRIPTION

SRP applied for and received a significant permit revision (S01-014) to Title V permit V95-008 in order to install three combined-cycle combustion turbine generator (CTG)/heat recovery steam generator (HRSG) units, referred to as Units S-5A, S-5B and S-6A. Each CTG is capable of generating 175 MW and each is rated at 1,640 MMBtu/hr of heat input. Units S-5A and S-5B have duct burners associated with one HRSG rated at 560 MMBtu/hr each. Unit S-6A has a duct burner associated with a second HRSG rated at 490 MMBtu/hr.

Each duct burner is subject to the applicable requirements of 40 CFR Part 60 Subpart Da, and each combustion turbine is subject to the applicable requirements of 40 CFR Part 60 Subpart GG. In addition to the requirements of these New Source Performance Standards (NSPS), each unit is subject to the applicable requirements of Title IV of the Clean Air Act (Acid Rain provisions) as set out in 40 CFR Parts 72 through 77.

Duct burners subject to the NO_x standard of 40 CFR §60.44a(d)(1) are explicitly not required to install or operate a continuous emissions monitoring system (CEMS) under 40 CFR §60.47a(o). This provision applies to the duct burners associated with Units S-5A, S-5B and S-6A. However, 40 CFR §60.46a(k) identifies compliance provisions for duct burners subject to §60.44a(d)(1). These provisions provide an option by which compliance can be demonstrated through the use of a CEMS along with other continuous monitoring systems. Condition 19.E.3 of permit number V95-008 provides SRP with the option of using CEMS to demonstrate compliance using the procedure set forth in 40 CFR 60.46a(k)(2). Based on this condition as well as permit condition 19.C.3 which requires the installation, calibration, certification and operation of a CEMS for Units S-5A, S-5B, and S-6A citing 40 CFR §60.47a(c)(1), it can be identified that these units may be required to operate a CEMS to demonstrate compliance with NSPS Subpart Da. (It should be noted, however, because the duct burners utilize natural gas exclusively (as required by locally enforceable permit condition 18.B.1), CEMS for measuring sulfur dioxide emissions are also not required. Thus, the

applicable provisions of NSPS Subpart Da may not require the operation of CEMS for Units S-5A, S-5B or S-6A if the corresponding compliance options are chosen by SRP).

The applicable monitoring requirements of NSPS Subpart GG do not require the installation and operation of CEMS for Units S-5A, S-5B and S-6A. The applicable provisions of 40 CFR §60.334 call for the monitoring of sulfur and nitrogen content of fuel being fired in the combustion turbines associated with Units S-5A, S-5B and S-6A.

The NSPS provisions related to CEMS installation, operation and maintenance as identified in 40 CFR §60.13 apply to CEMS required under NSPS subparts and those used to demonstrate compliance with emission limits on a continuous basis. The CEMS associated with Units S-5A, S-5B and S-6A may meet this criteria, and thus, may be required to meet provisions of 40 CFR §60.13. 40 CFR §60.13(d) states that “owners and operators of a CEMS installed in accordance with the provisions of (40 CFR Part 60), must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure.”

Units S-5A, S-5B and S-6A have also been identified as affected units as defined in 40 CFR Part 72. Accordingly, SRP is required to obtain an Acid Rain Permit and comply with the applicable monitoring requirements as provided in 40 CFR Part 75 in order to operate the units. 40 CFR §75.10 identifies requirements for measuring and recording pollutant emissions by installing, certifying, operating and maintaining CEMS. Exemptions to these requirements exist as identified in 40 CFR §75.11 for SO₂, 40 CFR §75.12 for NO_x, 40 CFR §75.13 for CO₂ and 40 CFR §75.14 for opacity. Units S-5A, S-5B and S-6A do not meet the exemption criteria for each pollutant and must therefore comply with the applicable portions of 40 CFR §75.21 pertaining to quality assurance and quality control requirements. 40 CFR §75.21(a)(1) requires that the procedures in 40 CFR Part 75 Appendix B be adhered to for CEMS used to report emissions data. 40 CFR Part 75 Appendix B 2.1 requires the performance of daily assessments including a calibration error test for periods of unit operation implicitly defined as a period in which a unit combusts any fuel.

Condition 19.B.27 of this permit previously required SRP to conduct calibration error and drift checks on the Continuous Emission Monitoring Systems (CEMS) associated with Units S-5A, S-5B and S-6A on a daily or more frequent basis, without clarification given regarding the necessity to perform the checks when the units are not operating. Listed below is the permit condition as was written into the Title V permit with the applicable portion underlined:

The Permittee shall at least annually conduct a RATA and bias check on the Unit S-5A, S-5B, and S-6A CEMS. The Permittee shall at least quarterly conduct linearity checks and cylinder gas audits (CGA) as required by 40 CFR Part 60 Appendix F 5.1.1. and 40 CFR Part 60 Appendix F 5.1.2. The Permittee shall at least daily conduct calibration error and drift checks on the Unit S-5A, S-5B, and S-6A CEMS as required by 40 CFR Part 60 Appendix F 4.1. More frequent audits and checks shall be conducted as required by 40 CFR Parts 60 Subpart A, Appendix F; and 40 CFR 75, Appendix B.

SRP has requested the permit condition be revised to require the referenced checks exclusively on days when the units are operational in accordance with the provisions of 40 CFR §60.13(i) which states that after receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements.

4. REVISED PERMIT CONDITION

Concern has been expressed over SRP's request listed above. If calibration error/drift checks are no longer required on a daily basis regardless of the operating status of the associated process equipment, situations may arise in which operation of process equipment is initiated without the presence of an accurate emissions monitor.

Based on the likely applicability of 40 CFR Part 60 Subpart A requirements to the CEMS associated with Units S-5A, S-5B and S-6A, and based on the language contained in 40 CFR §60.13, it has been identified that SRP's request may be justifiably denied. However, in order to cooperate with SRP in their effort to conserve resources, an additional requirement has been added to Permit Condition 19.B.27. The additional requirement allows SRP to discontinue daily calibration error and drift checks on the Units S-5A, S-5B and/or S-6A CEMS for periods where 14 or more days of continuous non-operation are scheduled for the corresponding unit. Records of approved generation outage must be maintained for periods when this condition is invoked by SRP. The additional language also requires a calibration error/drift check be performed for the Units S-5A, S-5B and/or S-6A CEMS, prior to the initiation of fuel combustion in the corresponding unit, if calibration and error and drift checks have not been performed during the previous 24 hour period.

Condition 19.B.27 has been amended to state the following:

The Permittee shall at least annually conduct a RATA and bias check on the Unit S-5A, S-5B, and S-6A CEMS. The Permittee shall at least quarterly conduct linearity checks and cylinder gas audits (CGA) as required by 40 CFR Part 60 Appendix F 5.1.1. and 40 CFR Part 60 Appendix F 5.1.2. The Permittee shall at least daily conduct calibration error and drift checks on the Unit S-5A, S-5B, and S-6A CEMS as required by 40 CFR Part 60 Appendix F 4.1. The Permittee may suspend daily calibration error and drift checks on the unit S-5A, S-5B, and S-6A CEMS for periods where 14 or more days of continuous non-operation is scheduled for the corresponding unit. Scheduled continuous non-operation must be indicated by the existence of an approved generation outage for 14 or more days. Once calibration error and drift checks have not been performed during the previous 24-hour period for a CEMS, calibration error and drift checks must be performed for that CEMS prior to initiation of fuel combustion in the corresponding unit. More frequent audits and checks shall be conducted as required by 40 CFR Parts 60 Subpart A, Appendix F; and 40 CFR 75, Appendix B.

5. APPLICABILITY OF MINOR PERMIT REVISION PROCEDURES

Evidence for objection to SRP's request to process this permit revision using minor permit revision procedures has not been identified.